

ZS72

17





BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST,"

AN ILLUSTRATED MAGAZINE DEVOTED
CHIEFLY TO THE BIRDS ON THE BRITISH LIST

EDITED BY

H. F. WITHERBY M.B.E. F.Z.S. M.B.O.U.

ASSISTED BY

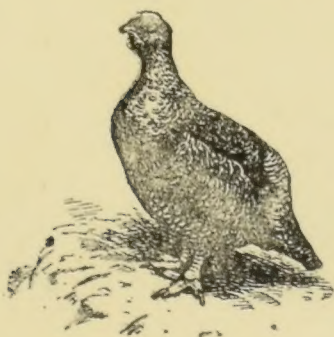
Rev. F. C. R. JOURDAIN M.A. M.B.O.U. H.F.A.O.U.

AND

NORMAN F. TICEHURST O.B.E. M.A. F.R.C.S. M.B.O.U.

Volume XVII.

JUNE 1923 — MAY 1924.



H. F. & G. WITHERBY
326 HIGH HOLBORN LONDON



2 MAY 1924

LIST OF ILLUSTRATIONS.

	PAGE
View of section of Malahide Sand-bank. (<i>Photographed by A. F. Park</i>)	6
Tracing from Ordnance Survey Map, 1909, shewing outline of Bank at High Tide of Malahide Island Golf Links with Breeding Ground of Terns ..	7
Sixteenth Century Bird Drawings	13, 14, 15
OYSTERCATCHER: Unusual nest of. (<i>Photographed by Seton Gordon</i>)	41
GREEN WOODPECKER: Wings of the (A) Adult, (B) Juvenile showing two abbreviated inner primaries	46
BARN-OWL: Material taken from nest-hole. (<i>Photographed by Miss Clemence M. Acland</i>)	61
BEWICK'S SWAN: Diagrams of portions of bill of, to illustrate markings	63
WHIMBREL: Returning to the nest with rapid strides. (<i>Photographed by W. E. Glegg</i>)	71
WHIMBREL: Nest. (<i>Photographed by W. E. Glegg</i>) ..	72
WHIMBREL: Preparing to settle on the eggs. (<i>Photographed by W. E. Glegg</i>)	73
WHIMBREL: Well settled down. (<i>Photographed by W. E. Glegg</i>)	74
MERLIN: Female brooding young ten days old, in sunny weather, July 2nd, 1922. The young can be seen under her breast. (<i>Photographed by G. C. S. Ingram</i>)	95
MERLIN: Female brooding during a heavy rain storm. (<i>Photographed by G. C. S. Ingram</i>)	96
MARSH-HARRIER: Egg and young in the nest. (<i>Photographed by E. A. Armstrong</i>)	103
WHIMBREL: Egg and chick in nest. (<i>Photographed by R. Chislett</i>)	151
WHIMBREL: Rising to accommodate a chick. (<i>Photographed by R. Chislett</i>)	152
WHIMBREL: Drawing near to egg and chick. (<i>Photographed by R. Chislett</i>)	153
SWISS NATIONAL PARK: Piz Quater Vals and Val Sassa. (<i>Photographed by W. H. Thorpe</i>)	161
SWISS NATIONAL PARK: Val Cluozza and Piz del Diavel. (<i>Photographed by W. H. Thorpe</i>)	163
OYSTERCATCHER: White egg of. (<i>Photographed by L. J. Turtle</i>)	168
CURLEW: Large clutch of eggs. (<i>Photographed by Misses E. V. Baxter and L. J. Rintoul</i>)	170

	PAGE
BLACKBIRD: An unusual nest. (<i>Photographed by M. U. Hachisuka</i>)	187
GREAT SPOTTED WOODPECKER: Fir-cone placed in position in cleft—and a worked cone at side. (<i>Photographed by N. Tracy</i>)	277
SNIPE, BRITISH AND AMERICAN: Outer tail-feathers from (above) 18 British Snipe (<i>Capella g. gallinago</i>), (below) 17 American Snipe (<i>C. g. delicata</i>). (<i>Photographed from feathers arranged by Col. R. Meinertzhagen</i>)	285
SNIPE, BRITISH AND AMERICAN: Axillary feathers of (above) 22 British Snipe (<i>Capella g. gallinago</i>), (below) 15 American Snipe (<i>C. g. delicata</i>). (<i>Photographed from feathers arranged by Col. R. Meinertzhagen</i>)	286
A Fourteenth Century Portrait of a Pheasant ..	313

Bud Room.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

JUNE 1.
1923.

Vol. XVII.
No. 1.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

The Magazine you have been longing for.
The Magazine that is different.

ARTICLES. REVIEWS. NOTES. PHOTOGRAPHS.

Write to-day for Illustrated Prospectus from the Editor, c/o.
(DO IT NOW)

SHERRATT & HUGHES, 34, Cross Street, Manchester

FOR SALE.

ARCTIC BIRDS' SKINS,
MAMMALS,
SKULLS AND EGGS.

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22.

Full particulars on application.

G. DINESEN, Dannebrogsgade 8, Copenhagen, B. DENMARK

JUST PUBLISHED
Volume I.

4to. ($9\frac{3}{4} \times 12\frac{5}{8}$ inches)
pp. xii. + 264

Price £10 10s. net.

A NATURAL HISTORY OF THE DUCKS

By JOHN C. PHILLIPS

Associate Curator of Birds in the Museum of Comparative Zoology at Harvard College

With Plates in Colour and in Black-and-White

FROM DRAWINGS BY

FRANK W. BENSON, ALLAN BROOKS AND
LOUIS AGASSIZ FUERTES

To be Completed in Four Volumes

VOLUME I.—Plectropterinae, Dendrocygninae, Anatinae (in part)

With 20 Maps and 18 Plates, of which 9 are in Colour

LONGMANS, GREEN AND CO.

39 PATERNOSTER ROW, LONDON, E.C.4

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND

NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 1, VOL. XVII., JUNE 1ST, 1923.

	PAGE
Additions and Corrections to the <i>Practical Handbook of British Birds</i> and to the <i>Hand-List of British Birds</i>	2
The Malahide, Co. Dublin, Tern Colony. By Geo. R. Humphreys, M.B.O.U.	5
On Some Sixteenth Century Bird Drawings. By N. F. Ticehurst, M.A., F.R.C.S., ENG.	12
Manx Ornithological Notes for 1921 and 1922. By P. G. Ralfe	17
Notes :—	
Probable Golden Oriole in Suffolk (Charles E. Alford) ...	21
Nuthatch concealing its Eggs during Incubation (Gerard H. Gurney and Stanley Lewis)	21
Woodchat Shrike in Pembrokeshire (The Hon. Guy Charteris)	22
Little Owl in Pembrokeshire (Major W. M. Congreve) ...	22
Black-necked Grebe in Sussex (N. F. Ticehurst)	22
Iceland Gull in the Isles of Scilly (H. W. Robinson)	23
Short Notes :—	
Grey Wagtail Nesting in Kent. Cuckoo Returning to Same Summer Quarters for Five Years. Velocity of the Tawny Owl	23
Letters :—	
Utility of Flight in Birds (T. G. Powell)	24
Barnacle-Geese in Dorset (Alistair C. Fraser)	24
Redbreast Feeding on Haws (Col. P. C. Macfarlane)	24

ADDITIONS AND CORRECTIONS TO THE
PRACTICAL HANDBOOK OF BRITISH BIRDS
AND TO THE
HAND-LIST OF BRITISH BIRDS.*

THE following alterations are necessitated by recent researches and by decisions arrived at by the British Ornithologists' Union List Committee. As the *Practical Handbook* is now nearing completion that work may now be used as a standard instead of the *Hand-List*, and consequently we do not here include those alterations already adopted in the *Practical Handbook* so far as published—viz., to part XVI.

CHANGES IN THE PRACTICAL HANDBOOK OF BRITISH
BIRDS.

30. *Pyrrhula pyrrhula nesa* Math. and Ired.

PYRRHULA PYRRHULA NESA Mathews & Iredale, Austr. Av. Record, III., p. 122 (1917—Great Britain)

instead of *P. p. pileata* Macg. which is considered to be merely a substitute name for *Loxia pyrrhula* Linn. and not specially applied to the British bird, though British specimens were described by Macgillivray.

54. *Emberiza tschusii compiler* Math. and Ired.

EMBERIZA COMPILATOR Mathews & Iredale, Austr. Av. Record, IV., p. 131 (1920—substitute name for *Emberiza palustris* Savi which is preoccupied by *E. palustris* Frenzel 1801)

instead of *E. palustris palustris*.

55. *E. t. tschusii*

instead of *E. palustris tschusii*, the name *tschusii* being twenty-two years older than *compiler*.

66. *Alauda arvensis intermedia* Swinh.

ALAUDA INTERMEDIA Swinhoe, Proc. Zool. Soc. London, 1863, p. 89 (Described from migrants from Shanghai)

instead of *A. a. cinerascens* Ehmcke, because the various varieties of Siberian Sky-Larks are considered to belong to one and the same form, the oldest name of which is *intermedia* Swinhoe.

* For previous lists of alterations and additions to the *Hand-List*, see *Brit. B.*, IX., pp. 2-10, XI., pp. 2-5, XIII., pp. 2-4, XV., pp. 2-3.

84. *Motacilla alba yarrellii* Gould

MOTACILLA YARRELLII Gould, Birds of Europe, List of Plates, Vol. II., p. 2 (1837—Great Britain)

instead of *M. a. lugubris* Temm. which is preoccupied by *M. lugubris* Licht., 1819. See Mathews & Iredale, *Austr. Av. Rec.*, IV., p. 132.

90. *Sitta europæa affinis* Blyth

SITTA AFFINIS Blyth, Journ. Asiatic Soc. Bengal, XV., p. 289 (1846—England)

instead of *Sitta e. britannica* Hart. Because Blyth's name can be adopted from his remarks on the preceding page (288) where differences of *S. e. europæa* were mentioned, which is not the case on p. 289 where the name first appears.

179. *Œnanthe deserti atrogularis* (Blyth)

SAXICOLA ATROGULARIS Blyth, Journ. Asiatic Soc. Bengal, XVI., p. 131 (1847—Upper Provinces, Sind, etc.)

instead of *Œ. d. albifrons* (Brandt) which is preoccupied by *Saxicola albifrons* Rüppell. See Mathews & Iredale, *Austr. Av. Rec.*, IV., p. 160 (1921), and C. B. Ticehurst, *Ibis*, 1922, p. 158.

182. *Œnanthe leucomela leucomela* (Pallas)

MOTACILLA LEUCOMELA Pallas, Nov. Comm. Petr., XIV., p. 584, pl. 22, fig. 3 ("1770," but not published until 1771—Lower Volga, Altai, Dauria, terra typica accepted Lower Volga)

instead of *Œ. p. pleschanka* because Lepechin is considered to have been not consistently binomial.

205. *Cinclus cinclus gularis* (Latham)

TURDUS GULARIS Latham, 2nd Suppl. Gen. Synops., p. xl. (1801—Penrith, Cumberland. Cf. Pennant, jun., Tour to Alston Moor, and last ed. of Pennant's Brit. Zool., ed. by Pennant, jun., I., p. 399, 1812)

instead of *C. c. britannicus* Tschusi. See Mathews & Iredale, *Austr. Av. Rec.*, V., pp. 63-4.

330. *Phalacrocorax aristotelis aristotelis* (L.)

PELECANUS ARISTOTELIS Linn., Faun. Svec., Faunula, p. 5, No. 146, ex p. 51 (1761—Sweden)

instead of *Ph. g. graculus* L. 1766. See Laubmann, *Verh. Orn. Ges. Bayern*, XV., p. 220 (Sept. 1922), and Mathews & Iredale, *Austr. Av. Rec.*, V., p. 48 (Feb. 1923).

367. *Cursorius cursor cursor* (Latham)

CHARADRIUS CURSOR Latham, Gen. Synops. Birds, Suppl. I., p. 293 (1787—Kent)

instead of *C. g. gallicus* (Gm.) which it antedates. See Mathews & Iredale, *Austr. Av. Rec.*, V., p. 63.

CHANGES IN THE *HAND-LIST OF BRITISH BIRDS* NOT
YET PUBLISHED IN THE *PRACTICAL HANDBOOK*.

436. *Larus glaucoides* Meyer

LARUS GLAUCOIDES Meyer, in Meyer & Wolf Taschenb. deutsch. Vögelk. Zusätze u. Ber., p. 197 (1822—Seas of Arctic Zone, for example Iceland, sometimes migrants German coasts. Restricted typical locality Iceland)

for *Larus leucopterus* Faber, which is preoccupied by *L. leucopterus* Vieillot. See Mathews & Iredale, *Austr. Av. Record*, IV., p. 156, and Hartert, *Vög. pal. Fauna*, Vol. III., p. 221.

445. *Uria aalge aalge* (Pontopp.)—THE NORTHERN GUILLEMOT.

COLYMBUS AALGE Pontoppidan, Danske Atlas I., pl. xxvi, p. 621 (1763—Iceland).

See Jourdain, *Brit. B. (Mag.)*, XVI., p. 322 (1923).

445a. *Uria aalge albionis* With.—THE SOUTHERN GUILLEMOT.

URIA AALGE ALBIONIS Witherby, *Brit. Birds (Mag.)*, XVI., p. 324 (1923—England, type Yorkshire).

AUTHORS OF THE "HAND-LIST."

THE MALAHIDE, CO. DUBLIN, TERN COLONY.

BY

GEO. R. HUMPHREYS, M.B.O.U.

LT.-COL. H. A. F. MAGRATH'S account (Vol. XVI., pp. 168-170) of the sudden abandonment of the Malahide breeding ground by all the Terns, on June 26th, 1922, is most interesting. A similar occurrence, which took place at another Irish ternery in 1920 is related by Mr. C. J. Carroll (Vol. XIV., p. 255).

Although I have visited the Malahide colony on various occasions during the past few years, it was not possible for me to devote sufficient time to make a close study of the habits of the different Terns which have bred there. As, however, I was much struck by the behaviour of the birds in the early part of the season of 1922, it occurs to me that it may be of interest to record my observations.

Before proceeding to do so it is only right to state, in view of what Col. Magrath says regarding the Roseate Tern (*Sterna d. dougallii*) and Sandwich Tern (*S. s. sandvicensis*), that this is where I discovered the Roseate Tern breeding in 1913 (cf. Vol. VII., pp. 186-189). A further note in regard to 1914 appeared subsequently (cf. Vol. VIII., p. 77), and in order to bring this information up-to-date, in so far as personal observation goes, extracts are given from my notes for the years 1915, 1919, 1920, 1921, and 1922. I had no opportunity of visiting the locality during the interval between 1915 and 1919, but understand Roseate Terns were seen there and apparently bred in each of the three intervening years.

With regard to the Sandwich Tern, details are now published for the first time.

The site of the colony is a long stretch of sandbank running almost parallel to the Malahide Island Golf Links. It is of typical character, a portion being overgrown with marram grass (*Amphiphila arundinacea*), sea-holly (*Eryngium maritimum*), short grass, etc., and a portion consisting of bare shingle. The accompanying photograph, for which I am indebted to Mr. A. F. Park, was taken early in August, 1921, from a position facing north-east. It gives a general view of the main portion of the breeding ground, where all five species of Terns have nested. The tide is some distance out, breakers being visible in the background, and Lambay Island appears prominently on the skyline.

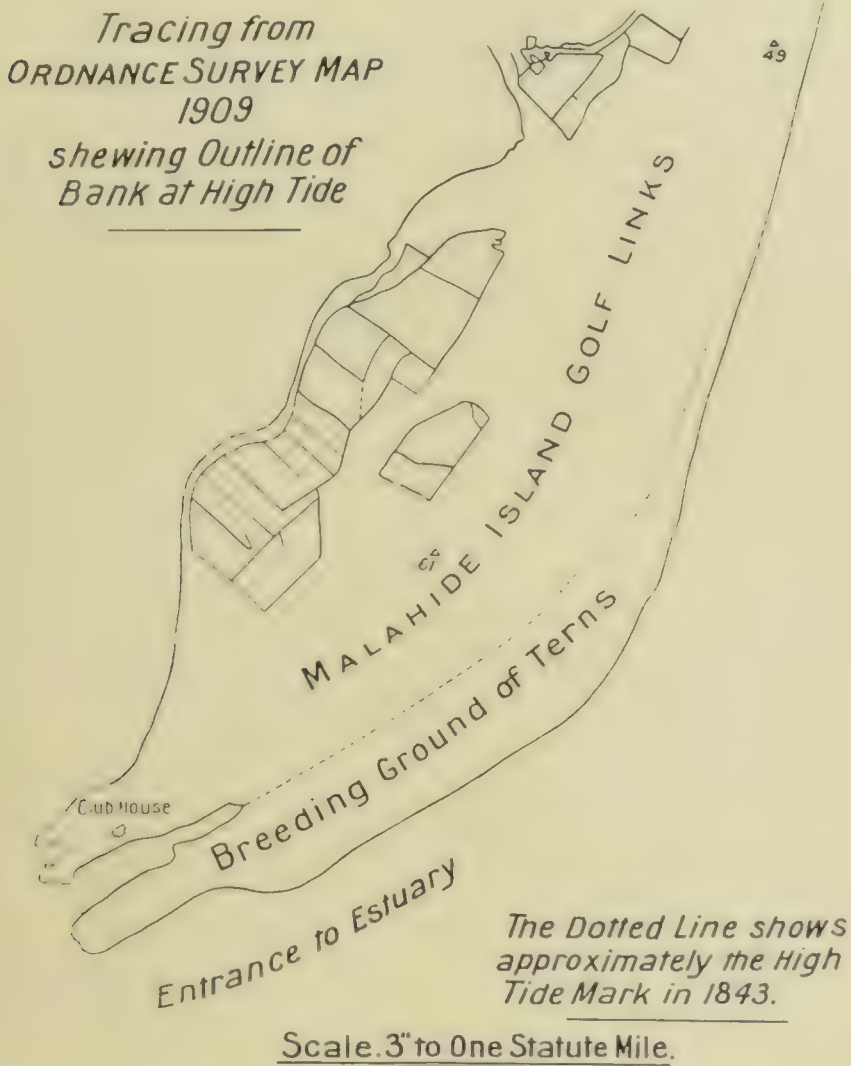
While we know that in the first half of the nineteenth century all the four larger species of Terns bred on Rockabill



VIEW OF SECTION OF MALAHIDE SAND-BANK.

(Photographed by A. F. Park.)

Island off the coast of Dublin, and before the lighthouse was erected there this was their chief stronghold, Thompson in his *Natural History of Ireland* (1851), Vol. III., gives definite information of the breeding of the Little Tern (*S. a. albifrons*) in 1840; the Common Tern (*S. hirundo*) in 1837, and possibly the Arctic Tern (*S. paradisæa*) on the shore at Malahide. At that time, however, the sandbank forming the present



site did not exist. This statement is supported by an examination of the Ordnance Survey Maps of 1837 (corrected to 1843), and 1909, from which the diagram included with this article has been prepared.

The earliest breeding record of any of the larger species on the present site would appear to be that of a pair of Common Terns in 1890 (Ussher and Warren, *Birds of Ireland*, p. 320). Mr. W. J. Williams informs me that early in June, 1900, he

saw a single pair of the Common Tern there, and found one nest containing two eggs. The next record I have is that for June 6th, 1903, on which date Mr. C. V. Stoney tells me he identified two pairs of Common Terns, and found two nests, each containing two eggs. Mr. Alexander Williams, who visited the bank in company with Mr. W. J. Williams on July 7th, 1907, states they counted 211 nests of Common and Arctic Terns, but mentions that many more were missed (*Irish Naturalist*, 1908, p. 121).

The foregoing will give an idea of the development of the colony when a comparison is made with the number of birds, *i.e.*, 3,000 to 4,000, mentioned by Col. Magrath. In such a large colony it is very difficult to estimate accurately the total number of birds, but I think the computation arrived at by Col. Magrath is quite fair. Of the total I should say fully 90 per cent. would be Common Terns; Arctic and Little Terns would account for another 9 per cent.; and the remaining 1 per cent. would possibly more than cover the number of Roseate and Sandwich Terns.

Extracts from the writer's notes on visits to the Malahide Tern colony since 1914:—

May 30th, 1915.—Little Terns have eggs in many cases. The other species have not yet commenced to lay, and very few of the birds are actually on the nesting ground.

June 27th, 1915.—Identified two pairs of Roseate Terns; in each case the birds are sitting on two eggs. The scrapes containing the eggs are in the centre of the Common Tern colony. In the dull light and absence of sunshine the paler grey plumage of the backs of the Roseates show up distinctly alongside the darker plumage of the common species.

July 4th, 1915.—No increase in number of Roseate Terns. A bright sunny day, and not possible to distinguish with certainty this species from the Common Tern in the same manner as on June 27th, the marked contrast in the shades of plumages of the two species being now nullified by the changed atmospheric conditions.

June 28th, 1919.—First visit since 1915. Much struck by large increase in number of Terns.

ROSEATE TERN.—Three birds are sitting, each on a single egg, in the Common Tern area. In one case the egg is laid under a small tuft of marram grass, a favourite position.

COMMON TERN.—Large number breeding. In some instances eggs are already hatched.

ARCTIC TERN.—This species is in possession of a section

of the shingle on the outskirts of the area occupied by the common species. Identified with certainty twelve Arctic Terns from where I lay. This section is situated away from the marram grass area, and contains more small shells and pebbles than the latter.

LITTLE TERN.—With the exception of one nest containing two eggs, young are out.

July 4th, 1919.—More Roseate Terns have laid. There are eight eggs, all singles, and the birds are sitting in every case. While Common Terns have nestlings in majority of instances, can only find one egg of Arctic Tern hatched.

June 15th, 1920.—Mr. C. J. Carroll and self spent portion of the day at the colony. A careful inspection revealed a great many nests and eggs of Common Tern; also some of Arctic and Little Terns. We saw three eggs of Roseate Tern, laid by different birds, and estimated there were from eight to twelve pairs of this species present, the majority not having commenced to lay. While watching the Roseates we heard the cry of a Sandwich Tern; following the sound two of these birds were seen flying towards us. Neither of them alighted, and flying seaward they were soon lost to sight.

June 22nd, 1920.—Another single egg of Roseate Tern laid in a scrape under an overhanging tuft of marram grass. A very high tide, and as the result of similar conditions last night a great many nests of Common and other Terns have been submerged, and the eggs washed away and deposited singly or in small heaps along high water mark.

July 6th, 1920.—Another Roseate Tern has an egg in a hollow well hidden under a tuft of marram grass. Not possible to ascertain how many Roseates have laid since June 15th.

June 14th, 1921.—Common and Arctic Terns have eggs, and a number of the former are sitting. No Roseate Terns appear to have laid.

June 18th, 1921.—Most of the Arctic Terns are now sitting. There are six eggs, all singles, of Roseate Terns; in every case these birds showed their anxiety to return to their eggs after being disturbed.

June 26th, 1921.—Mr. C. V. Stoney and I visited Malahide. We identified fourteen "nests" of the Roseate Tern. In one case only were there two eggs, and the birds were engaged in incubating in every instance. We concluded there were from fifteen to twenty pairs of Roseate Terns here.

June 10th, 1922.—Greatly struck by the small number of Terns on the bank, but on the other hand delighted to see two Sandwich Terns apparently sitting. On investigation

found each bird had been covering a single egg, both eggs appeared to be quite fresh. An examination of the birds in the air revealed the presence of three pairs of Sandwich Terns, but I failed to discover more than the two eggs.

The Arctic Terns have shifted their quarters and laid their eggs at the estuary end of the shingle adjacent to the area occupied by the Little Terns. While the Arctic Terns are sitting no Common Terns are ; in fact, only very few of the latter species have commenced to lay. Made a note of the following eggs, identifying the Arctic Terns while sitting. In two instances the Common Terns were standing close to their eggs. Little Terns sitting where two or more eggs were in evidence.

Arctic Tern.—7 sets of 2 eggs.

Common Tern.—2 sets of 2 eggs, and 2 single eggs.

Little Tern.—1 set of 3 eggs ; 6 sets of 2 eggs, and 4 single eggs.

Remarked on the wild and restless behaviour of the Terns, particularly the common species. No Roseates seen.

June 11th, 1922.—The Sandwich Terns' eggs have disappeared. Later on discovered that three single eggs of this species had been taken by boys, one egg subsequently coming into my possession and on being blown proved to be quite fresh.

While more Common Terns have commenced to lay can only find one nest with three eggs. As on previous day the birds are very wild and restless.

June 17th, 1922.—The Terns are still wild and restless, many keeping very high in the air. Although the numbers have increased since 10th inst., they are below those of previous year. A careful search revealed the presence of three Roseate Terns ; a pair and what was evidently an unmated bird. These birds are particularly wild and keep flying round at a high altitude ; apparently no attempt at nesting has so far been made.

While, from personal experience, the Roseate Terns are the last to commence their domestic duties, I believe it is generally the case in the British Isles, where Common and Arctic Terns select a common breeding-ground, that the former are the earlier of these two species to commence to lay, although overlapping naturally takes place.

It will be seen from my notes for 1922 that the Arctic Terns were actually sitting before any of the Common Terns had completed laying.

The suggestion has already been put forward by other observers that the solution to the sudden departure of the Terns from both these Irish colonies was the shortage or failure of the local food supply, and from the following summary of my own observations it appears to me that this difficulty was already manifesting itself at the Malahide colony at the time of my visits, but apparently did not reach a critical stage until June the 26th :—

1. Reduction in number of Terns.
2. Wild and restless behaviour on the part of those birds actually at the breeding-ground.
3. Delayed egg production in the case of the Common Tern.
4. Apparent normal conditions existing in regard to egg production in the case of the Arctic Tern.

In conclusion, I do not propose to comment on Nos. 1, 2 and 3, but as No. 4 may be considered by some readers to have no bearing on the point at issue, I would remind them that the Arctic Tern breeds much further north than the common species, its breeding range extending far within the Arctic circle. Being naturally therefore a hardier species its reproductive system would probably be less affected than that of the Common Tern.

ON SOME SIXTEENTH CENTURY BIRD DRAWINGS.

BY

N. F. TICEHURST, M.A., F.R.C.S., ENG.

DURING a visit to Canterbury in 1921 I took the opportunity of examining a sixteenth century manuscript (A.14) in the Library of the Dean and Chapter, to which my attention had been drawn by its mention in the ninth Report of the Historical MSS. Commission (p. 125). It may be called shortly "William Burch's Common Place Book" and was evidently the work of the leisure hours of that gentleman, who seems to have been a lawyer's apprentice. Its scope is fairly well indicated by its title page, which runs as follows :—

" A booke of drawing of the shapés and formes of divers beasts, foules & birds, ffishes, monsters, serpents, trees, herbes, plantes & flowers, wth diverse accidents of antiquities & armory drawn by me William Burch alias Ellis alias Vicar of the King's Bench in South warke this XX Aug. 1590 anno XXXII^{do} Elizabeth Regina w^{ch} booke pertenes to John Nettleton gent. being Master to the sayd W^m Burch."

A thin, folio, paper book, it is filled with pen and ink drawings, the greater part of which are of heraldic devices and coins, only the earlier pages being devoted to beasts and foules, while the whole is interspersed with proverbs, mottoes, quotations and rhymes in Latin and English. With a single exception none of the written remarks have any bearing on the birds figured and there is no evidence that their delineator was in any sense an ornithologist, but that he was for his time unusually gifted as a draughtsman in pen and ink, particularly as a copyist, is clear. In addition he seems to have been gifted with some power of observation and of transferring what he saw to paper.

With the exception of a rather nicely executed Partridge (as an heraldic device) on folio 34b., the bird drawings will all be found on ff. 13 to 16 and on the reverse of f. 21, both sides of the paper being used. Being much struck with these drawings, I obtained, through the kind offices of Dr. Cotton and with the permission of the Dean and Chapter, a complete set of photographs of them. It was with no little disappointment therefore that I found on comparison that a very large majority had been copied from the *Icones Avium* of Conrad Gesner, most probably from the *editio secunda* of 1560, as drawings of the Flamingo and Toucan are included which do not appear in the first edition of 1555. At the date when

Burch executed his drawings the only other source from which he could have copied them was *L'Histoire de la Nature des Oyseaux* of Pierre Belon (1555), but it is quite clear that none of them were taken from this source.



When the copies are compared with the originals it is found that quite a number have been reversed, but they are otherwise so exact in detail that their origin could not for a moment be doubted. Disregarding these, therefore, there remain one or two others that appear to be original and as such worthy of brief consideration. Of these the figures of the Crane come first. This bird seems to have been a favourite subject as the series contains no less than four examples, and it is not

improbable that the artist had seen the bird alive, perhaps in a semi-domesticated state in the grounds of some large house. In each case the bird is drawn carrying a stone or clod of earth in one foot, Burch evidently having in mind the



legend of the Sentinel Crane, which is thus rendered in Sylvester's translation of du Bartas :—

" And when the honey of care-charming sleep
 Sweetly begins through all their veins to creep.
 One keeps the watch, and ever carefull-most,
 Walks many a round about the sleeping hoast
 Still holding in his claw a stony clod,
 Whose fall may wake him if he hap to nod.
 Another doth as much, a third, a fourth,
 Untill, by turns the night be turned forth."

These drawings, the best of which is here reproduced, though much later than those given by Mr. Gurney (*Early Annals of Ornithology*, pp. 26 and 45), would yet seem to be amongst the earliest English ones of this bird, and not improbably may be sketches of an example of our indigenous race. The next drawings of some interest are those of the Turkey. The best of these is an obvious copy from Gesner, but the other representing a Turkey cock squatting on the ground in characteristic pose is no doubt original. About fifty years after its first mention as an acclimatized species in England, Turkeys were probably becoming common and widely dispersed by 1590, for they figured in the menu of the serjeants-at-law in 1555, at the Christmas dinner of Sir



William Fairfax of Gilling, Yorks., in 1572, and as gifts in the Account Book of Chamberlain of Canterbury in 1568 and of the Earl of Rutland in 1594, so that Burch had probably plenty of opportunities of seeing them alive, and his drawing, small and faded though it is, is probably the earliest English picture of this bird that has come to light.

The Barn-Owl is obviously a bird with which he could have been personally acquainted, and his drawing quite faithfully portrays it and may well have been done from life. So too, though more crude, the drawing of one of the North African Eagle-Owls whose origin is sufficiently explained by its accompanying inscription:—

“An owlle taken in the deasartes of Arabya of this forme but greater then Anye Eagle being seene a liue for monye in Thames streete 27 August 1591.”

The bird had no doubt been brought to London by a sailor on a vessel trading between the Thames and the eastern Mediterranean and is an interesting example of early aviculture.

The last three pages of these bird drawings contain a series of six groups of birds which, despite the incongruity of some of their members, reminiscent of the "mixed" cases of some taxidermists' windows, show a certain degree of artistic grouping, some acquaintance with nature and a good deal of spirit. Most of the birds in four of the groups are again copies, those of the other two, of which one is here reproduced, are mostly original. Not many of these are recognizable, but the Hoopoes are good, the Grey and Pied Wagtails, Lapwing and Cuckoo may be guessed at, while the air of jocular contempt of the Spoonbill for the small birds mobbing the Owl borders on the humorous.

MANX ORNITHOLOGICAL NOTES FOR 1921 AND 1922.

BY

P. G. RALFE.

THE following notes are intended to continue the Manx record from December 31st, 1920 (see *British Birds*, Vol. XV., p. 40), to December 31st, 1922.

I am specially indebted to Messrs. F. S. and T. H. Graves and Colonel Madoc, M.B.O.U., for the report of many observations.

The Honey-Buzzard is a new record for Man.

The Manx Museum, opened at Douglas, November 2nd, 1922, has already a considerable collection of local specimens, representing about 130 species, many of them collected by Mr. P. M. C. Kermode, the Curator, during the long years of his service as Secretary of the Isle of Man Natural History and Antiquarian Society. The cases include a female Golden Oriole (Laxey, 1879), an immature White-tailed Eagle (Greeba, 1907), a Honey-Buzzard (Glen Auldyn, 1907), two Bitterns, two Gadwalls and all four species of Grey Geese.

RAVEN (*Corvus c. corax*).—Several more nesting-sites have been seen by Mr. F. S. Graves and myself, one very low and conspicuous on the coast near the town of Peel; two others in old quarries inland.

On February 13th, 1921, Mr. Graves observed a male Raven, near a nesting-place, planing into a strong wind with wings slightly flexed. Suddenly it turned on its back, and planed in that position. This performance was repeated at least twelve times, the Raven remaining on its back about thirty seconds.

BRITISH COAL-TIT (*Parus a. britannicus*).—I have received from Mr. E. Greenhalgh a Manx specimen obtained at Onchan in November, 1922. This has none of the characteristics of the Irish form, the white on the head and nape being pure, and the flanks neutral in tint. Three mounted specimens procured some years ago in the neighbourhood of Douglas agree in the white cheek and neck patches; one of them has somewhat richer colour on the sides. Field observations by myself and several friends tend to the same result, which was to be expected, as it appears that the Coal-Tits of the part of Ireland nearest to the Isle of Man are of British type. The species is probably comparatively recent with us, and increasing.

In August, 1922, Mr. T. H. Graves saw in his garden at Lezayre a small Black-capped Tit, which had no white spot on the neck. He was able to observe the bird well at a very short distance.

Neither the Marsh nor the Willow-Tit has ever been recorded in Man.

BRITISH LONG-TAILED TIT (*Ægithalos c. roseus*).—On January 30th, 1922, Colonel Madoc observed four at Kirby.

WAXWING (*Bombycilla garrulus*).—Mr. T. H. Graves reports Waxwings as seen by several persons near Ramsey in December, 1921.

GARDEN-WARBLER (*Sylvia borin*).—In July, 1921, Mr. T. H. Graves saw one, and heard its song in his garden at Lezayre. Its presence at this time looks like an instance of breeding in Man, which, though not improbable, has never yet been ascertained.

WOOD-WARBLER (*Phylloscopus s. sibilatrix*).—In May, 1922, I heard the song at Ballure, Ramsey, on one occasion three birds not far from each other.

LESSER WHITETHROAT (*Sylvia c. curruca*).—A nest of this species was found by Mr. T. Bell on June 3rd, 1908, at Ballabarragh, on the borders of Andreas and Bride. It contained five eggs, which were identified at Cromwell Road, and undoubtedly belong to the species. Some years later Mr. Bell found a second nest, with four eggs, perhaps a quarter mile distant.

Colonel Madoc tells me that on May 23rd, 1920, he found a nest with two eggs on the Peel Golf Links.

WHINCHAT (*Saxicola r. rubetra*).—On May 17th, 1921, Mr. F. S. Graves saw a male and female on Peel Golf Links (not, however, apparently nesting), and on August 12th Mr. M. V. Wenner saw one in Blabae Glen.

(BRITISH) DIPPER [*Cinclus c. (britannicus)*].—I have compared, with the help of Mr. P. M. C. Kermode, three Manx specimens of Dipper (all mounted) with seven skins from N. England and Wales, and eight Irish skins (kindly lent respectively by the Free Public Museum, Liverpool, and the Irish National Museum, Dublin).

No. 1.	Tromode, November, 1880	} Manx Museum.
No. 2.	No data	

No. 3.	Castletown, November, 1915.	P. G. Ralfe.
--------	-----------------------------	--------------

Nos. 1 and 2 are both decidedly light-coloured on head, even lighter than the British specimens, and of a somewhat different tint. The rest of the upper plumage is also light and very uniform. The chestnut band is very broad in both (this distinction is very marked between the British and Irish specimens examined).

No. 3 is very different. The back and head are dark, but the former distinctly mottled, the chestnut band very narrow. This last bird, which is somewhat damaged, was submitted to Mr. Witherby, who, however, hesitates to pronounce on its affinity.

In my opinion, 1 and 2 on the whole, resemble British specimens in plumage. No. 3 is more similar to Irish.

But more and especially, as Mr. C. R. Nichols points out, newly killed Manx specimens are needed to arrive at a conclusion as to the relationship of the Manx bird. It is to be remembered that the Dipper is scarce in Man, and I should regret a wholesale slaughter of our resident birds in order to prove the point.

NORTHERN GREAT SPOTTED WOODPECKER (*Dryobates m. major*).—The specimen shot at the Nunnery, February 7th, 1899, and now in the Manx Museum (*Birds of I. of Man*, p. 114), undoubtedly from its measurements (wing 140 mm.) and the shape of its beak, belongs to the Northern form (*D. m. major*), (measured by Mr. Cutmore, Liverpool Museum).

CUCKOO (*Cuculus c. canorus*).—On November 12th, 1921, Mr. F. S. Graves put up an adult Cuckoo from marshland near Peel. It flew from one hedge across open ground to settle in another.

HEN-HARRIER (*Circus c. cyaneus*).—On December 16th, 1921, a female specimen was shot in the Ballaugh Curragh, where it was said

to have been preying on Moorhens. It came into the possession of Colonel Madoc.

HONEY-BUZZARD (*Pernis a. apivorus*).—The female Buzzard shot in Glen Auldyn in June, 1907 (*Brit. Birds*, 1909-10, p. 217), has come into the possession of the Manx Museum, and proves to be a Honey-Buzzard, a very dark specimen.

BITTERN (*Botaurus s. stellaris*).—In December, 1921, Colonel Madoc received a specimen from the Curragh at Sulby, which had been obtained on the 23rd of that month.

GADWALL (*Anas strepera*).—A Drake was identified by Mr. T. A. Coward and Colonel Madoc at Kentraugh on September 28th, 1922.

GREAT NORTHERN DIVER (*Colymbus immer*).—Cases of birds with oil-clogged plumage have occurred here as elsewhere of late years. On May 10th, 1922, a Great Northern Diver swam ashore under Peel town, pushed itself up the sand, and began preening its feathers. Approached within 15 yards, it shuffled back into the water. On May 14th it was captured on the rocks of the Castle Island, and brought into a yard, where it lay on its breast; was fierce and vicious, and uttered a cry like the blast of a horn; also a few short grunts. Its plumage was nearly perfect; there was a small patch of oil under its right wing. Being liberated on the shore, it swam into the bay, where it was repeatedly seen by many people until the 30th of the month. (F. S. Graves.)

GREAT CRESTED GREBE (*Podiceps c. cristatus*).—Mr. F. S. Graves received a specimen taken in Peel Harbour in November, 1921, and saw another at the same place on February 7th, 1922. This species has rarely been obtained in Man, and always on the coast. On April 4th, 1922, Mr. F. Taylor reports another at Port Erin.

KNOT (*Calidris canutus*).—The species is curiously scarce on our coasts, but was seen by Mr. T. A. Coward, Colonel Madoc and myself on the southern bays in September, 1922. The former gentlemen observed a flock of about twenty-four.

CURLEW-SANDPIPER (*Erolia ferruginea*).—Colonel Madoc reports six seen on October 4th, 1922, at Ronaldsway and one on October 6th in Castletown Bay.

LITTLE STINT (*Erolia m. minuta*).—Three were seen by Mr. Coward and Colonel Madoc at the Langness pools with Sanderlings and Grey Plovers on September 26th, 1922.

PURPLE SANDPIPER (*Erolia m. maritima*).—In the winters of 1921-22, and 1922-23, Mr. F. S. Graves several times saw a few on the Castle Island at Peel, where he remembers the species about forty years ago; on January 27th, 1923, there were six birds. In the Isle of Man the Purple Sandpiper has thus been observed for long periods in very restricted localities; at Douglas for some thirty years; at Scarlett for about twenty-five.

GREEN SANDPIPER (*Tringa ochropus*).—On January 18th, 1922, Mr. F. S. Graves flushed a specimen at the Ballacross "Dubs," German.

GREAT BLACK-BACKED GULL (*Larus marinus*).—On a visit to the Calf of Man on June 3rd, 1921, some half-dozen mature birds were seen, and pairs had evidently bred on two high isolated stacks, on one of which I found a young bird. In 1922 a pair was certainly nesting on a stack off Bradda.

BRITISH LESSER BLACK-BACKED GULL (*Larus fuscus affinis*).—This species, which breeds along with Herring-Gulls on the lower parts of the Calf, seems to have much decreased in numbers.

KITTIWAKE (*Rissa t. tridactyla*).—The picturesque colony on the western cliffs of the Calf, under the Lighthouse, no longer exists. That on the adjacent mainland is large and increasing.

COMMON GUILLEMOT (*Uria t. troille*).—There is now a small colony (about two dozen birds) on the cliffs of Peel Hill. (F. S. Graves.)

BLACK GUILLEMOT (*Uria g. grylle*).—For some weeks during January and February, 1921, a small party, very tame and apparently exhausted, from time to time came to rest on the concrete steps of the harbour breakwater at Peel. One in particularly soiled and wet plumage, the result of contact with oil. (F. S. Graves.)

LITTLE AUK (*Alle alle*).—Mr. P. Quayle, of Douglas, has two specimens in winter plumage, killed about 1900 on the little lake at Bellevue, a mile inland from Douglas.

LANDRAIL (*Crex crex*).—On September 10th, 1921, Mr. F. S. Graves flushed one from rushes on Lhergy Ruy (about 1,300 ft.).

QUAIL (*Coturnix c. coturnix*).—In February, 1921, Mr. T. L. Kermode several times flushed small numbers at Ballacross, and on October 3rd, 1921, two at Ballanayre, both in Peel district.

NOTES

PROBABLE GOLDEN ORIOLE IN SUFFOLK.

AT Walberswick, Suffolk, at 5.30 a.m. on April 28th, 1923, I was awakened by a bird which I have no doubt whatever was a Golden Oriole (*Oriolus oriolus*). Unfortunately in the half light that prevailed at that hour I was unable to get a view of it. The extremely loud, flute-like, call-note was repeated incessantly for several minutes and then gradually grew more faint as the bird moved on.

It reminded me of the note of the Red-winged Blackbird of America (*Agelaius phoeniceus*), and was unlike anything I have ever heard before in England. Judging by the hour and season, I assume that it had possibly just come in from the sea and was passing inland.

CHARLES E. ALFORD.

NUTHATCH CONCEALING ITS EGGS DURING INCUBATION.

WITH reference to Mr. S. G. Cumming's note (Vol. XVI., p. 307) on the Nuthatch (*Sitta eu. affinis*) concealing its eggs, I have repeatedly noticed that this species when leaving its eggs during incubation covers them up before quitting the nest. The Nuthatch is common enough at Keswick, Norwich, and nests freely every year in bird-boxes in the garden (this year I have three nests), and whenever I have looked into the boxes and found the bird off, the eggs have always been covered up with the scales and flakes of pine bark with which the nests are invariably made. I do not think the eggs slip down out of sight, but I believe the old bird covers them up of her own accord for the sake of safety when leaving the nest. As a general rule the entrance hole in the nesting boxes is made much smaller by mud brought by the birds when soft, but this is not generally done until incubation has begun, or at any rate is started during the period of egg-laying and carried on during incubation, until the hole is small enough to suit the birds' requirements. The lids or tops of the nesting boxes also are often tightly fixed down with mud, so that it is impossible to lift them off without breaking the mud; if one does this, however, it does not necessarily mean that the birds will desert the nest.

GERARD H. GURNEY

I HAVE several times obtained what seems to be proof that the Nuthatch (*Sitta eu. affinis*) occasionally conceals its eggs, *if given time, after being disturbed*. On one occasion at a nest in an old Green Woodpecker's hole, 25 feet high in a white poplar, seven eggs were visible by the aid of an electric bulb, and the bird was clearly seen at the back of the hole. After waiting a few minutes I again mounted the ladder and found the eggs covered by the oak leaves of the nest and the bird still at the back of the hole.

On May 4th, 1923, at a nest six feet up in a natural hole of a mountain ash at Cheddar, I counted eight eggs in a rather compact nest of pine strips only (after removing most of the clay at the entrance). A friend and I then retired to a ditch to watch; the bird came out and collected bits of bark "peelings" and took them into the hole very quickly.

On looking in we found the eggs well hidden underneath the nesting material, a portion of one egg only could be seen beneath the strips of bark peeling, and this not easily.

STANLEY LEWIS,

WOODCHAT SHRIKE IN PEMBROKESHIRE.

ON the afternoon of May 4th, 1923, in some marshy ground on the Penally Golf Course close to Tenby, I saw a brilliant specimen of the Woodchat Shrike (*Lanius s. senator*). The bird was very tame and twice allowed me to approach within a few yards.

According to *The Practical Handbook* (Vol. I., p. 271), the species has not previously been recorded from Wales.

GUY CHARTERIS.

LITTLE OWL IN PEMBROKESHIRE.

WHEN game-shooting on the Angle peninsula in the extreme S.W. corner of Pembrokeshire in November, 1922, I saw two Little Owls (*Athene noctua*), and was informed by the game-keeper that they had appeared some time previously and were obviously increasing.

W. M. CONGREVE.

BLACK-NECKED GREBE IN SUSSEX.

ON March 22nd, 1923, a Black-necked Grebe (*Podiceps n. nigricollis*) was taken in a fishing-net off Hastings and brought alive to the local museum, where I saw it. It was a beautiful bird in full breeding-plumage and appeared to be quite uninjured. The same evening it was taken by Mr. Butterfield to the Alexandra Park and liberated on one of the ponds. It

was still there the next day, but has not been seen since. It is to be hoped that it has safely reached its nesting quarters somewhere in England.

N. F. TICEHURST.

ICELAND GULL IN THE ISLES OF SCILLY.

AN Iceland Gull (*Larus glaucoides*) has frequented St. Mary's, the Isles of Scilly, all the winter, and is still here, May 9th, 1923. It is in the pure white intermediate stage of plumage of the species. On April 16th, 1914, one followed our boat out of Penzance Harbour, and even this date was a late one to find the species so far south (*Brit. Birds*, VIII., p. 21). During the winters I spent in Orkney, the Iceland Gull was not uncommon, but I never saw one in this beautiful intermediate plumage, the majority being mottled immatures and the remainder adults.

W. H. ROBINSON.

GREY WAGTAIL NESTING IN KENT.—The Rev. J. R. Hale informs us that *Motacilla c. cinerea* now breeds regularly near Maidstone, where he has found several pairs nesting since 1921. This is a slight extension eastward of its known breeding area in this county.

CUCKOO RETURNING TO SAME SUMMER QUARTERS FOR FIVE YEARS.—With reference to his note in Vol. XVI., p. 190, Mr. T. L. S. Dooley writes that a Cuckoo (*Cuculus c. canorus*) which, from its unusual note, he considers to be the same individual as the one therein mentioned, has returned to the same summer quarters for the fifth successive summer.

UTILITY OF THE TAWNY OWL.—The Rev. J. R. Hale writes that in a nest of *Strix aluco sylvatica* in Kent, containing two newly hatched young ones, he counted thirty long-tailed field-mice.



LETTERS

VELOCITY OF FLIGHT IN BIRDS.

To the Editors of BRITISH BIRDS.

SIRS,—A few days ago I timed a Cormorant (*Phalacrocorax carbo*) for sixty seconds flying a straight course along the Orwell estuary. During this period it covered a distance of three-quarters of a mile as nearly as I could estimate by careful calculation from the one-inch ordnance map. This was at the rate of forty-five miles per hour. The light wind slightly favoured it. The flight was obviously of a normal, unhurried character.

T. G. POWELL.

IPSWICH, April 22nd, 1923.

BARNACLE-GEESSE IN DORSET.

To the Editors of BRITISH BIRDS.

SIRS,—Three Barnacle-Geese have been observed at Blandford, Dorset, by the River Stour, in 1923, twice during April and once in May. They are believed to have escaped from a private park at Iwerne Minster, Dorset, and have been noticed before at the same time of year.

These might be the birds seen in Wiltshire by your correspondent, as reported in *British Birds* for May (Vol. XVI., p. 328).

ALISTAIR C. FRASER.

THE GROVE, WOODCHURCH ROAD, BIRKENHEAD.

REDBREAST FEEDING ON HAWS.

To the Editors of BRITISH BIRDS.

SIRS,—With reference to the notes on this subject (Vol. XVI., pp. 253, 327), it may be worth recording that in May, 1923, I saw a Redbreast (*Erithacus r. melophilus*) here, feeding its mate with hawthorn berries. The bird was only taking a very small piece of the berry and letting the seed fall to the ground.

P. C. MACFARLANE.

BALLAGAN, STRATHBLANE, STIRLINGSHIRE.



STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 1 (new series), Aves, etc., 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS,

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND

F. H. L. WHISH,

TAXIDERMIST,

LYMPHAM, SOMERSET,

Specialises in the setting-up of Birds. No work leaves the premises lacking artistic handling and accuracy in detail; the charge for such work being exceedingly moderate.

A SELECTION OF H. F. & G. WITHERBY'S NEW BOOKS

The Deer and Deer Forests of Scotland

Historical, Descriptive and Sporting. By ALEXANDER I. McCONNOCHIE, F.Z.S. Royal 8vo. Numerous photographs. 25/- net

Record Bags and Shooting Records (2nd Impression)

Compiled in many cases from hitherto inaccessible sources and private records, to which are added sections upon marksmanship, and the speed and weight of birds. By HUGH S. GLADSTONE, M.A., F.R.S.E., F.Z.S., M.B.O.U., Author of "The Birds of Dumfriesshire," "Birds and the War," etc. Demy 8vo., with photographs and reproductions from old engravings. 15/- net

The Highlands with Rope and Rucksack

Introducing a sports-ground practically unexplored by cragsman and tourist; with accounts of climbing and tramping by peak and pass. By ERNEST A. BAKER, D.Lit., M.A., Author of "Moors, Crags and Caves of the High Peak," "The Netherworld of Mendip," etc. Demy 8vo., numerous photographs. 12/6 net

A Naturalist in Hindustan

By MAJOR R. W. J. HINGSTON, M.C., M.B., I.M.S., Author of "A Naturalist in Himalaya." Demy 8vo. With photographs and sketches. 16/- net

The Badger, Afield and Underground

A Monograph for the Sportsman and Naturalist, containing every known detail in this animal's life, by day and night, with observations bearing on fox-hunting. By H. MORTIMER BATTEN, F.Z.S., Author of "Habits and Characters of British Wild Animals," etc. Demy 8vo. Photographs and sketches. 8/6 net

Windjammer Yarns

Incidents in the life of a South African seaman in the Wooden Ships and Steam Tramps of Fifty Years ago. By CAPTAIN ALEX ANDERSON. Demy 8vo., with contemporary photographs. 12/6 net

From Golden Gate to Golden Sun

A Record of Travel, Sport and Observation in Siam and Malaya. By HERMANN NORDEN. Fellow of the Royal Geographical and American Geographical Societies. Demy 8vo., numerous photographs. 15/- net

A Monograph of the Pheasants

A sumptuous work, compiled from the Author's own observations and from all published sources. By WILLIAM BEEBE. Four Vols., Royal 4to. Numerous coloured plates, photogravures and maps. £12 10s. net per vol.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

JULY 2.
1923.

Vol. XVII.
No. 2.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

"The kind of Nature Magazine we have wanted for some time."—

Westminster Gazette.

"We wish Dr. Renshaw every success."—*The Ibis.*

Write to-day for Illustrated Prospectus from the Editor, c/o

SHERRATT & HUGHES, 34, Cross Street, Manchester
DO IT NOW.

FOR SALE.

**ARCTIC BIRDS' SKINS,
MAMMALS,
SKULLS AND EGGS.**

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22

Full particulars on application.

G. DINESEN, Dannebrogsgade 8, Copenhagen, B. DENMARK

G. A. BENTALL,

NATURALIST,

392, Strand, London, W.C.2.

MAMMALS, BIRDS' SKINS, EGGS, LEPIDOPTERA,
COLEOPTERA, &c.

BOOKS, CABINETS, STORE BOXES AND COLLECTING
APPARATUS.

Taxidermy in all its Branches. Trophies Mounted.

Catalogues on any of the above subjects post free on request.

LE GERFAUT

REVUE BELGE D'ORNITHOLOGIE,

Fondée en 1911.

Le seule publication scientifique belge traitant des oiseaux, spécialement
des oiseaux de la Belgique.

Abonnement 10 francs par an.

Direction : Square Prince Charles 21, Bruxelles-Lacken (Belgique).

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND

NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 2, VOL. XVII., JULY 2, 1923.

	PAGE
Birds at Dungeness, September, 1922. By H. G. Alexander	26
Some British Birds in the Fourteenth Century. By N. F. Ticehurst, M.A., F.R.C.S.	29
The Introduction of the Ring-necked Pheasant to Great Britain. By Hugh S. Gladstone	36
Notes :—	
Golden Oriole in Shropshire (H. E. Forrest)	38
Song of the Citril Finch (J. B. Watson)	38
Early Breeding of Yellow Bunting in Suffolk (D. W. Musselwhite)	38
Grey-headed and Blue-headed Wagtails in Cornwall (G. H. Harvey)	38
Early Nesting of the Grey Wagtail (The Duchess of Bedford)	39
Unusual position for Nest of Goldcrest (T. G. Powell) ...	39
Movements of House-Martins in the Scilly Isles (H. W. Robinson)	39
Migrant Wrynecks in Yorkshire (W. J. Clarke)	40
Increase of the Fulmar Petrel on the Yorkshire Coast (E. Arnold Wallis)	40
Unusual Nest of Oystercatcher (Seton Gordon)	41
Great Black-backed Gull breeding in Somersetshire (Geoffrey C. S. Ingram and H. Morrey Salmon)	41
Short Notes :—	
Yellow-browed Warbler in Fifeshire. Spreading of Great Spotted Woodpecker in Argyllshire. Little Owl in Cornwall. Garganey in Lanarkshire. Red-necked Phalarope and Goshawk seen off Co. Kerry. Unusual Nesting Site of Pheasant.	42
Reviews :—	
<i>A Natural History of the Ducks</i> , by John C. Phillips ...	44
<i>The Great Waxwing Invasion of 1921</i> , by James Ritchie, <i>Scottish Naturalist</i> , 1922 and 1923	45
<i>The Abbreviated Inner Primaries of Nestling Woodpeckers</i> , by James P. Chapin, <i>The Auk</i> , 1921	45
Letters :—	
Does the Black Kite take live Fish (J. B. Watson)	47
The Name of the British Song-Thrush (Gregory M. Mathews and Tom Iredale)	47

BIRDS AT DUNGENESS, SEPTEMBER, 1922.

BY

H. G. ALEXANDER.

I WAS fortunate enough to spend a week at Dungeness (September 22nd-27th) when migration was exceptionally intense. The lighthouse does not seem to attract many migrants, except on rare occasions ; but during this particular week there were Sandwich Terns (*Sterna sandvicensis*) almost every evening, and Dunlins (*Calidris alpina*), Curlews (*Numenius arquata*), Song-Thrushes (*Turdus philomelus*), Hedge-Sparrows (*Prunella modularis*), and Flycatchers once or twice ; the small birds were heard on the evening of the 22nd, when the sky was dull, with little wind. Similar weather conditions prevailed most of the week—alternate periods of clear and overcast skies, with no strong wind, but with heavy rain early on the 24th, and rain on the 26th and 27th in the afternoon. The moon was new on the 21st, so that all the nights were dark.

A great number of passerine birds were on the move and quantities of waders, also some birds of other kinds ; but these were the outstanding features of the migration. The passerine migrants included flocks of Hirundines, Pied, Yellow and Grey Wagtails (*Motacilla a. yarrellii*, *M. f. rayi* and *M. c. cinerea*), Meadow-Pipits (*Anthus pratensis*), and various Finches (Linnets and Greenfinches) and Reed-Buntings (*Emberiza schæniclus*) passing southwards in the early morning, the movement of Hirundines continuing to about mid-day. On the 24th, after the heavy rain early, I saw no Finches or Pipits, but Hirundines were arriving from over the Channel (perhaps from about Grisnez or further south) and travelling north-east over the shingle and even north up the coast, the wind being between east and north—a few, however, were moving in the opposite direction, along the usual southward route.

The rain, or direction of the wind that morning, had apparently also caused an exceptional " hold up " of Warblers and Chats. In the low bushes of the coastguard gardens round the old signal station I counted the following birds at mid-day : One Blackbird (*T. merula*), one Ring-Ouzel (*T. torquatus*), three Whinchats (*Saxicola rubetra*), one Stonechat (*S. rubicola*), two Redstarts (*Ph. ph. phænicurus*), two Robins (*Erithacus rubecula*), six or seven Whitethroats (*Sylvia communis*), one Lesser Whitethroat (*S. curruca*), one Garden-Warbler (*S. borin*), two Willow-Wrens (*Phylloscopus trochilus*),

two Spotted Flycatchers (*Muscicapa striata*), one Pied Flycatcher (*M. hypoleuca*), also several Linnets (*Carduelis cannabina*) which may have been residents. It is just possible that the Blackbird was a resident. I feel sure that the Robins were not. Later the same day I found that the broom-bushes near the lighthouse were full of small birds, chiefly Redstarts, and I had a good view of a Bluethroat (*Luscinia svecica*), but I could not determine the subspecies; I incline to think there was a second, and when the light was going I thought I saw two Black Redstarts (*Ph. ochrurus*), but they were rather wild. Next morning only one or two of the Redstarts remained. Whinchats, Stonechats, Whitethroats, Chiff-chaffs (*Ph. collybita*) and Willow-Wrens were the most numerous of the small "bush-birds"; I saw one or two other Pied Fly-catchers and on the 23rd a male Firecrest (*Regulus ignicapillus*). This, I think, is rather an early date. The movement of Goldcrests and Wrens had apparently not begun. There was a Wryneck (*Jynx torquilla*) in the bushes on the 27th, and I put up a Nightjar (*Caprimulgus europæus*) on the 26th. Both of these, in my experience, are distinctly late dates for the south-east of England. Some of the small birds evidently stay for some time in the bushes; thus, the Lesser Whitethroat already mentioned was seen each day from the 23rd to the 27th.

The migration of "bush birds" seemed decidedly less strong after the 24th, but many waders were on the move all the time. On the 24th there were quantities on Littlestone sands, including a party of fourteen Little Stints (*Calidris minuta*), several Knot (*C. canutus*), Curlew-Sandpiper (*C. ferruginea*), and many Sanderlings (*Crocethia alba*) and Dunlins; whilst flocks of Dunlins and of one or two larger species were seen going south-west. On the 25th, in walking along the coast from Dungeness to Rye, I actually saw no less than twenty-two species of *Limicolæ*; this, of course, was partly luck, as I saw only a single representative of twelve of these, and only two each of three others.

The list is perhaps worth giving:—Oyster-Catcher (*Hæmatopus ostralegus*), Stone-Curlew (*Burhinus ædicnemus*), Ringed Plover (*Charadrius hiaticula*), Kentish Plover (*Ch. alexandrinus*), Golden Plover (*Ch. apricarius*), Grey Plover (*S. squatarola*), Lapwing (*V. vanellus*), Turnstone (*Arenaria interpres*), Knot, Sanderling, Dunlin, Curlew-Sandpiper, Little Stint, Temminck's Stint (*C. temminckii*), Common Sandpiper (*Tringa hypoleuca*), Green Sandpiper (*T. ochropus*), Redshank (*T. totanus*), Spotted Redshank (*T. erythropus*)

Greenshank (*T. nebularia*), Bar-tailed Godwit (*Limosa lapponica*), Black-tailed Godwit (*L. limosa*), Curlew, Snipe (*C. gallinago*). The Temminck's Stint was feeding among the salt-marsh vegetation beside the river Rother ; this had just been covered by a spring tide, and numbers of small waders—Dunlins, Curlew-Sandpipers and Little Stints—were feeding near it, and were so busy and so tame that I could approach almost as near as I liked to them. It was astonishing how closely some of the Curlew-Sandpipers and Dunlins seemed to approximate in both size and colour ; but the former kept up a constant low chattering as they fed, and were, of course, easy to identify by their white rumps when they flew. A single Curlew-Sandpiper on the Littlestone sands the day before, on the other hand, was conspicuously larger than the Dunlins around it. The Temminck's Stint kept to itself, and was easily distinguishable by its markings from some Little Stints (about a dozen) not far off ; when I put it up I also saw the white in the sides of its tail. The Black-tailed Godwit was also by the Rother, close to Rye ; the Spotted Redshank at the Midrips.

Two Short-eared Owls (*Asio flammeus*) flying together over the links near New Romney on the evening of the 20th are perhaps also worth mentioning.

SOME BRITISH BIRDS IN THE FOURTEENTH CENTURY.

BY

N. F. TICEHURST, M.A., F.R.C.S. ENG.

IN his *Early Annals of Ornithology* the late Mr. Gurney wrote (p. 64): "From a naturalist's point of view the fourteenth century is chiefly remarkable for our extreme ignorance of the conditions of bird life which then prevailed in the British Isles," and further on "of Household accounts and charges at feasts there are but few." This being so it is a little curious that he omitted to refer to the long series of account rolls of the Monastery of Durham, selections from which fill three volumes (99, 100 and 103) of the publications of the Surtees Society. Although these run from 1278 to 1541, the entries in which birds are mentioned are nearly all derived from rolls of the fourteenth century. That they were not unknown to Mr. Gurney is clear, for he quotes (p. 79) the mention of the Jackdaw in 1410 and gives the dates of the records of the Crane in a footnote on p. 164. It must be presumed therefore that he did not become aware of their existence until after he had finished the chapter dealing with this period. It may therefore be not without interest to give here a brief account of what may be gathered from this source by way of supplement to what he has written. It furnishes us at least with a list of some five and twenty species that were known by name at this time, the majority of which formed a considerable proportion of the dietary of a large and wealthy Priory.

In attempting to draw conclusions as to the relative abundance of species from the material available we are on dangerous ground, for it must be remembered that this is not derived from a complete transcript of the rolls, but from a series of selected items, made by an editor whose interest was mainly antiquarian and philological and not ornithological; so that while we may be certain that the earliest mentions of each species have been given, the number of quotations concerning a particular species does not necessarily bear any relation to the frequency with which that species occurs.

Mentions of the ordinary domestic species may be passed over as of but little interest; they are very numerous, numbers of cocks, capons, hens, pullets, ducks and geese being purchased week by week. Dove-cote pigeons, often entered as young ones (*pull. columpharum*), occur with considerable regularity, while entries of wild fowl (*volatilia*) are also frequent and small birds (*minutis avibus*) are recorded several times. It is

impossible of course to guess at what species were comprised under these last two expressions, so we may pass at once to those whose identity is more or less certain.

CROWS or ROOKS and MAGPIES.—There are three quotations from the Bursar's rolls mentioning these species :—

“ 1348. Cuidam capienti corvos et picas per diversa maneria Prioratus ex præcepto Prioris

1368-9. In uno capucio coruino, viij d.

1378-9. Garcioni portanti coruiculos, vj d.”

The first shows that the three, for presumably “*corvos*” includes both the Rook and Crow, were sufficiently numerous on the manors of the Priory to require thinning down. The third evidently refers to young Rooks as an article of food. The meaning of the second is somewhat obscure; if a hood made of Crow-skins is really what it means, as the editor suggests, it is not very easy to imagine the utility of such a garment, though it may possibly have been used in some Play.

SKYLARK.—It would be imagined that Skylarks would have been a fairly frequent article of diet, so that it is a little surprising to find only a single mention of them extracted from the accounts. It occurs in the Cellarer's roll for Christmas week, 1344, when six dozen (*vj duoden. alaud.*) were purchased with Ducks and Teal.

FIELDFARE.—Fieldfares were no doubt a welcome addition to the dietary of the monks, when they could be got, and the two quotations in which they are mentioned both occur in the Cellarer's rolls for April, during their northward passage. There are only two earlier mentions of this bird known :—

“ 1343. j duoden. de feldfar.

1347. In iij copul. anat., vij anat. domesticis, ij corleus, et iij duoden. de feldefares emp., iij s. xj d. ob.”

They also occur in a subsequent entry for mid-December, 1430.

HAWKING.—There are but three extracts given (all from the Bursar's rolls) bearing on this subject, though it is evident from one of them that it was a sport that was indulged in by at least one of the Priors. The Merlins presented to Earl Warren were presumably young birds bred on one of the Priory manors :—

“ 1333. Heruico Hunter et Waltero Mauyhan euntibus cum emerlionibus ad Com. Warenn. ex parte Prioris, xj d.

1335. In carnibus recent. empt. pro falconibus d'ni Regis, iiij. d.

1378-9. Will'o Cotom portanti j Goshauk de d'no Joh'e de Lilborn d'no Priori, xij d.”

COMMON HERON.—Rewards are twice chronicled in the Bursar's rolls, in 1349-50 and 1381-2, for the bringing of Herons as presents; they do not appear in the Cellers' rolls as being bought for the kitchen until 1404.

"1349-50. Cuidam deferenti Heronceaus Priori, de Acley usque Dunolm., vj d."

It would be interesting to know if there is any recent knowledge of a Heronry existing or having existed at Aycliffe (5 miles N. of Darlington).

WHOOPEE.—A single reference to this species is extracted from the Bursar's rolls and is remarkable in that it carries back the use of the word "Elke" to a date over two hundred years earlier than previously known (1552 in N.E.D.).

"1338-9. Et in vj cignis campestr., vidz. Elkes, empt., ix s."

MUTE SWAN.—Swans appear to have been kept from a very early date, though perhaps not in large numbers, as there are records of them being purchased from even as far away as York. They seem to have been the property of the Prior, for in the Cellers' roll for 1388 we read "*In ij signis per Priorem, nil.*" and to have been distributed over the different manors of the Priory, as payments are recorded in 1330 and 1349-50 for conveying them to Ketton, in Aycliffe, and "*ad diversa loca prioratus.*" while in 1383 half-a-crown was paid for repairing the mill-dam at Bewley for their use. The earliest mention is of one bought for the Easter festivities, April 20-27, 1329.

WILD GOOSE.—Only a single reference to Wild Geese has been extracted and it is of course impossible to guess at what species was meant. It comes from a Cellers' roll of about 1375:—

"In vij aucis indomitis, ij s. ix d."

Nine "*aucis feris*" were purchased in 1416.

SHELD-DUCK.—There are three extracts from the Cellers' rolls for 1326 and 1330 and one from the Bursar's roll for 1338-9 that mention the purchase of certain birds under the name "*aucæ rosettæ*" or "*rosatæ*," as many as twelve being bought for the Easter feast in April, 1330, and four more a week later. In his glossary the Editor suggests that we should read *russettæ* and understand the term to denote the Sheld-Duck, which seems a very reasonable supposition. Whether correct or not the name does not appear to have been previously brought to the notice of ornithologists. Their value in 1338 was fivepence halfpenny each. "Sheldrakes" occur fairly frequently in the seventeenth century accounts of Naworth Castle.

MALLARD.—A careful distinction is drawn in the Cellarers' Rolls between the domestic Duck and the wild Mallard and, as is to be expected, there are numerous entries of both. The former are generally entered simply as *anates* and the latter as Mallard, Maular or Maularde, but where the two occur in the same or neighbouring entries the distinction is emphasized as in the following :—

“ Jan. 11-17, 1349.—In v Mallard domestic. et v Mallard de Ryver et xiiij perdicibus, iiij s. x d. ob.

Feb. 1338.—It. in 2 Copul. de Maulard de Ryver empt. per Burs., xv d.”

The next entry including “*anatibus domesticis*.”

The purchases for Christmas, 1348, included no less than 63 Mallard, Teal, Curlew and Plover, and in 1326-7 sixteen Mallard were bought in one lot.

TEAL.—Only five mentions of the Teal have been extracted and, judging by the small numbers of each, it was evidently nothing like as numerous as the Mallard. They are entered variously as “teill,” “teles” and “tels.”

COMMON EIDER.—It is not to be expected that we should find any record of the Eider as an article of food, but from the fact that the Priory of Durham contained the shrine of St. Cuthbert it is not surprising to find several allusions to it. The first of these seems to be the earliest mention of the bird after Reginald of Durham's Chronicle (*circa* 1170), quoted by Mr. Gurney. It occurs in the Bursar's roll for 1380-81, and records the payment of a shilling to a painter of Newcastle for a picture of an Eider :—

“ In sol. facta uni pictori de Novo Castro pro pictura volucris Sci. Cuthberti pro exemplare pro le Rerdos, xij d.”

The second furnishes us with the earliest instance of the use to which Eider-down is commonly put at the present day. It occurs in the inventory taken on June 14th, 1397, at the vacation by Robert de Langchestre of his office of Feretrar :—

“ Item ij parva pulvinaria quorum j est de Cuthbert doun.”

From being specially mentioned we may conclude that this cushion was of special value, and the use of Eider-down in this way was evidently not usual, for many cushions are mentioned and there are frequent records of expenses for repairing and filling them, but this is the only one that was stuffed with this material. It occurs again in exactly the same words in similar inventories for 1401 and 1418.

The third allusion is contained in the Hostillar's roll for 1399, and records the purchase of a dossal or ornamental hanging, no doubt for the Guest-hall, “*cum avibus Sancti*

Cuthberti " that were presumably embroidered or painted on it.

PLOVER.—Plovers, of what species it is impossible to determine, were evidently a favourite dish and to be had in considerable quantity. Entries are numerous and they were generally bought in lots of several dozen, the earliest record being a lot of fifty purchased in 1312-13. Their price in 1390 was two pence each which seems rather high when compared with other articles and perhaps indicates the estimation in which they were held. They are always entered as " plivers " or in a latinized form of the same word.

CURLEW.—Curlew, spelt in a variety of ways, also figure frequently in these accounts and were evidently exceedingly numerous, though less easily procured than Plover. They were bought in small lots up to about half a dozen and their price varied from three halfpence in 1338 to eightpence each in 1390. Their earliest mention is as " Curleus " in 1311-12.

WOODCOCK.—There are not many entries of " Wodekokes " in the accounts; the bird is not mentioned until 1347 and the numbers purchased were invariably small. Either they were really uncommon or the inhabitants of co. Durham in the fourteenth century were not very apt at snaring them. The comparatively high price (1½d. to 3½d. each) paid for them shows that they were somewhat unusual luxuries. This is somewhat surprising when we compare the very large numbers that were taken in Cumberland, as given in the accounts of Naworth Castle, three centuries later.

COMMON SNIPE.—This bird does not appear in these account rolls until 1430.

CRANE.—Mr. Gurney has mentioned (*Early Annals*, p. 164, footnote) that the Crane occurs in these accounts in 1312-13, 1358, *circa* 1375 and 1390. The second is to be found in the Bursar's rolls, the others in those of the Cellerer. Unfortunately, from the material quoted, the exact time of year of these occurrences cannot be determined and the full context of one entry only is given, the last :—

" In iii signis, uno grue, xvj perdicibus, ij curflows, xiiij plivers, xiiij s. iiij d."

but there can be no doubt that all the others refer to the Crane and not the Heron.

CAPERCAILLIE and BLACK GROUSE.—It is convenient to consider the ten quoted extracts relating to these birds together, as it is certainly a matter for argument as to which of the two some of them refer, while they add perhaps a little to our knowledge of the history of the former in England.

They all occur in the Cellers' rolls and being of special interest are here given in full :—

" 1323-4. In vj gallis silvestribus nigris

Dec. 1324. In xxvij gallis nigris.

Jan. 1325. In vij gall. silvestribus.

Feb. 1325. In x gall. nigris.

May 1325. In xvj gall. nigris.

Sept. 1337. In cxxxij gall., ij caponibus, iv duoden. pull. columb. et xxiiij gall. silvestribus empt. a diversis per parcellas, cum eorum esca, xxv s. ij d.

Jan. 1348. In perdic., plovers, anatibus et gallin. silvestr., ij s. viij d.

Dec. 1-7, 1348. In ij gall. de bosco cum minutis avibus empt., v d.

1417. In j auca et j gall. silvestr. empt., v d. ob.

In xxvj gallinarum silvestr. empt., iij s. iiij d. ob."

There cannot be the least doubt that in four of the above the Black Cock is meant, while it is equally certain that in *gallina silvestris* we have the "wode hennes" specified as rent in the grants of land in co. Durham in 1343 and 1361, first made known to us by Mr. Harting (*Zool.* 1879, p. 468), who identified these birds as Capercaillie. This has been accepted by Saunders (*Yarrell*, ed. IV.) and more recently by Mr. Mullens, who gave us the texts of these grants from Hazlitt (*B.B.*, XV., pp. 64, 65). Mr. Gurney, on the other hand (*Early Annals*, p. 68), hesitates to accept this and suggests that they may have been Black Grouse. The present records seem to afford some slight assistance in clearing up this point, an important one, for we know so little about the status of the Capercaillie in England since prehistoric times. On the whole, I incline to the opinion that these Wood-hens were Grey Hens. On the face of it, it hardly seems probable that such a pre-eminently masculine and martial individual as the cock Capercaillie could have been included with his mate under such a title, though it is not improbable that it may have been used for such similarly coloured birds as the female of this species and the Grey Hen. It seems too, that in these accounts, which have every appearance of careful and accurate book-keeping, we clearly have two contrasting terms used, "*gallus silvestris niger*" or "*gallus niger*" for the male and "*gallina silvestris*" for the female, just as we find in the seventeenth century household accounts of Naworth Castle, Cumberland, the Black Cocks and Grey Hens entered separately as different items. It does not seem very likely either that the Capercaillie could have been so numerous or so easily caught that twenty-four

or twenty-six could have been purchased at a time, even if, as in one case, they were bought from different people. A comparison of the prices paid, which might afford valuable evidence one way or the other, is unfortunately impossible as, in the only quotations that clearly refer to the Black Grouse, the amounts are not given.

The single entry for the first week of December, 1348, however, seems to be much more promising as a genuine allusion to the Capercaillie, for if we extend the abbreviation to "*gallis* (not *gallinis*) *de bosco*," which is quite legitimate, we have at once a literal translation of its well-known appellation Cock-of-the-Wood, which it may well have been called in the fourteenth century. This suggestion is supported by the fact that the same scribe had already used the expression "*gallinis silvestribus*" in a previous entry on the same roll, so that he almost certainly wished to indicate something different in the present one. The fact also that only a single instance of this name has been extracted from the accounts, suggests a status more in accordance with expectation than the larger numbers of the other would indicate.

The entry for September, 1337, is particularly interesting, as it seems that these birds were sometimes purchased alive, with food for their maintenance until required for the kitchen.

RED GROUSE.—As is to be expected, the Red Grouse figures frequently in the Cellers' rolls, being purchased in lots of usually three to six or seven brace. They are generally entered under their mediæval name of "*morecok*" or "*murkoke*," though here and there they appear under the feminine equivalent, which seems to be unusual, e.g.,

"Mid-July, 1348. In *vj* *morehennes* emp.

Nov. 24-30, 1348. In *ix* *aucis* et *xj* *gallinis* de mora et *j* *capone* cum pastu, *iiij* s. *xj* d. ob. q."

COMMON PHEASANT. The Pheasant was evidently an uncommon bird in Durham at this period, for only a single mention of it has been extracted from the rolls, though, curiously enough, it is the earliest in point of date of any bird in the series, and is taken from the Bursar's roll for 1299:—

"In *xxvj* *perdicibus* et uno *fesaund* empt. de G. P'trikur, *v* s."

COMMON PARTRIDGE.—The Partridge, on the other hand, occurs with considerable frequency. From the numbers purchased at one time (lots of twelve to eighteen brace are not infrequent) it was evidently quite abundant and a valued addition to the dietary of the Priory. It is generally entered under its Latin name *perdix*, but several variants of its English name, e.g., "*pertrikis*," "*pertrykes*," also occur.

THE INTRODUCTION OF THE RING-NECKED PHEASANT TO GREAT BRITAIN.

BY

HUGH S. GLADSTONE.

It is very remarkable that the date of the introduction of the Ring-necked Pheasant (*Phasianus colchicus torquatus*) to Great Britain should be unknown. The species appears to have been first named *P. Torquatus* by J. F. Gmelin in 1789, but the only distinctive character which he gives is "*torque albo*,"* and it must be pointed out that in giving the name *torquatus* Gmelin refers to Latham; in fact, this is the only reference which he quotes and therefore his *torquatus* is founded upon the "Ring Pheasant" of Latham, so that it is necessary to refer to Latham's work for the identification of the bird.

John Latham writes in 1783 of the "Ring Pheasant" as:—"a fine variety of this bird [the Pheasant] is now not uncommon in our aviaries."† In 1787 he states:—"I have scarce a doubt but these birds will hereafter become full as plentiful in this Kingdom as the Common Pheasant. It is well known that several noblemen and gentlemen have turned out many pairs into their neighbouring woods, for the purpose of breeding."‡ In 1823 he writes of:—"this beautiful variety . . . being now at large in England. . . These were, it is said, first introduced by the late Duke of Northumberland, by the name of Barbary Pheasants, and many were bred, and turned out at large, at His Grace's seat at Alnwick. Lord Carnarvon did the same at Highclere, in Berkshire, and the late Dutchess Dowager of Portland, at Bulstrode, Bucks, besides many private gentlemen, by which means the breed is daily becoming more common; it is true, that these mix and breed with the Common Sort, and that in such produce the ring on the neck is less bright, and sometimes incomplete, but which of the two will ultimately preponderate, in respect to plumage, can scarcely be conjectured."§

From the above it would appear that Ring-necked Pheasants were known as aviary birds in England prior to 1783 and that four years later some had been "turned out at large." It

* Gmelin: *Linné Systema naturæ*: Vol. I., pt. II., 1789, p. 742; for the date 1789 see *Proc. Zool. Soc.*, 1907, ii., p. 1,035.

† *A General Synopsis of Birds*: Vol. II., pt. 2nd, 1783, p. 715.

‡ *Supplement to the General Synopsis of Birds*: 1787, p. 208.

§ *General History of Birds*: Vol. VIII., 1823, pp. 190-1.

may, however, be pointed out that "the late Duke of Northumberland" died in 1786, and "the late Dutchess Dowager of Portland" in 1785, so that the Ring-necked Pheasant must have been at liberty before these dates. With these facts before us I think it can be reckoned that the Ring-necked Pheasant (which in spite of Latham's doubts has undeniably superseded the old English Pheasant) had become a denizen of certain of our woods shortly prior to 1785.

It may be of interest to add that the earliest coloured plates of the Ring-necked Pheasant, in any British book on ornithology are to be found in W. Hayes, and family's *Portraits of Rare and Curious Birds . . . from the Menagery of Osterly Park*, 1794; where, facing pp. 57 and 58, there are given portraits of "Ring Pheasant" male and female.* It may, perhaps, be noted that Thomas Bewick, in his *History of British Birds*, Vol. I., 1797, gives a woodcut of the "Ring Pheasant" and states (p. 284) that this figure was "engraved from a fine specimen" sent him by the Rev. Wm. Turner of Newcastle.

The peculiar circumstances under which *Phasianus colchicus torquatus* came to be acclimatized in the island of St. Helena so long ago as 1513,† cannot be repeated in detail here, but it may be observed that Mr. W. B. Tegetmeier stated in 1886: "With regard to the alteration in plumage produced by an exposure to these new conditions for 373 years, it must be confessed that they are remarkably insignificant."‡

* The frontispiece, portraying "A Ringnecked Pheasant," in *Rare and Curious Birds. Accurately Drawn and Beautifully Coloured, from Specimens in the Menagery at Osterly Park. By W. Hayes and Family*; 1782 (in Lib. Zool. Soc., London), can hardly be regarded as a "coloured plate," since it has every appearance of being but an original picture which has been mounted to fit the volume and it may be noted that it is neither signed nor dated. An article, dealing with "A sixteenth century portrait of the pheasant," will be found in *British Birds*, Vol. XV., pp. 67-69, in which it is shown that it is by no means certain that the Pheasant portrayed was *P. torquatus*.

† T. H. Brooke: *A History of the Island of St. Helena*: 1808, pp. 37-38.

‡ W. B. Tegetmeier: *Pheasants, their natural history and practical management*: 4th ed., 1904, p. 164.

NOTES

GOLDEN ORIOLE IN SHROPSHIRE.

ON May 2nd, 1923, an adult male Golden Oriole (*Oriolus oriolus*) was seen at close quarters in a garden at Prees, Whitchurch, Salop. I recorded another near Ludlow on May 18th, 1922 (*antea*, Vol. XVI., p. 78). H. E. FORREST.

SONG OF THE CITRIL FINCH.

IN the *Practical Handbook* no mention is made of the song of the Citril Finch (*Carduelis c. citrinella*). The note of this species I have found to be very characteristic and a sure means of identification. In flight the call-note is of a peculiar creaking-like nature.

Comparing this bird's song with that of the Serin (*Serinus c. serinus*), I should say that the latter's is a continuous hissing twitter, not without musical quality—whilst the song proper of the Citril Finch is more of an outburst comparable with that of the Wren or Hedge-Sparrow, but somewhat forced and husky, with the characteristic "creaking" note, already mentioned, running through it. J. B. WATSON.

EARLY BREEDING OF YELLOW BUNTING IN SUFFOLK.

IN Suffolk on March 30th, 1923, I flushed a Yellow Bunting (*Emberiza c. citrinella*) from a nest containing three fresh eggs. I have never before found a nest with eggs of this species earlier than the last week of April, and for this latter month I have only one record. D. W. MUSSELWHITE.

GREY-HEADED AND BLUE-HEADED WAGTAILS IN CORNWALL.

On May 12th and 13th, 1923, I observed an undoubted Grey-headed Wagtail (*Motacilla flava thunbergi*) at the Marazion Marsh, near Penzance. I obtained several very close views of it, so close that, with the aid of field-glasses, the details of plumage could be made out almost as well as if I had had it in my hand. The distinguishing characteristics were: forehead, crown and back of neck, dull slate-grey; no vestige of a light stripe above the eye; a dull black band extending from the base of the bill, under and partially round the eye, on to the ear-coverts; little or no white on the chin, the under-parts being yellow, with the exception of a few dark marks on the

upper-breast. The rest of the plumage was as in the Blue-headed Wagtail (*M. f. flava*). A pair of the latter birds were about the Marsh, so I had ample opportunity for comparison.

The bird was generally on one piece of marshy ground, associating with Pied and Yellow Wagtails, but once I saw it feeding round a grazing horse, in the manner characteristic of Wagtails and many other birds. G. H. HARVEY.

EARLY NESTING OF THE GREY WAGTAIL.

ON April 15th, 1923, I found a nest of the Grey Wagtail (*Motacilla c. cinerea*) with five young, in the wisteria outside the window of a house at Milton Abbot, Devon. The date seems remarkably early, especially when taken in conjunction with the wintry coldness of the weather. M. BEDFORD.

UNUSUAL POSITION FOR NEST OF GOLDCREST.

A NEST of the Goldcrest (*Regulus r. anglorum*) found within four yards of a public road, and in full view of it on April 20th, 1923, at East Coker, Somerset, was placed about 5 ft. from the ground, and very lightly, not to say insecurely, fastened against thickish bare stems of ivy twisted round the trunk of a deciduous tree, so that its full contour stood out from the trunk. It was closely felted of green moss externally, and was absolutely unconcealed, with not even an ivy leaf near it. Of course, nests in ivy on trunks of trees have been frequently recorded, but are generally more or less concealed by the foliage. T. G. POWELL.

MOVEMENTS OF HOUSE-MARTINS IN THE SCILLY ISLES.

ON February 17th, 1923, two House-Martins (*Delichon u. urbica*) were seen on the Island of Tresco, one of the Scilly Isles and were still there a week later. Possibly they had never migrated, owing to the mild winter.

During May, on the Island of St. Mary's, I only saw single birds of this species to the number of six, the first being on May 6th, when one was on the telegraph wires with 103 swallows.

On the afternoon and evening of June 1st a large number came to roost on St. Mary's. The telegraph wires held long rows of them, and the reeds round a large tarn were bent almost double by their weight, there being up to ten and a dozen on some reeds. They left next morning, few, if any, remaining. H. W. ROBINSON.

MIGRANT WRYNECKS IN YORKSHIRE.

IN connection with the record of the occurrence of Wrynecks (*Jynx t. torquilla*) on the Northumberland coast during September, 1922 (*antea*, Vol. XVI., p. 325), it is interesting to note that examples visited the Yorkshire coast about the same time. A fine adult was picked up, in a dying condition, at Scalby Mills, near Scarborough, on September 9th, 1922, and another was observed at Whitby on the same date.

W. J. CLARKE.

INCREASE OF THE FULMAR PETREL ON THE
YORKSHIRE COAST.

SINCE Mr. G. W. Temperley first reported the presence of a pair of Fulmar Petrels (*Fulmarus g. glacialis*) at Bempton in 1919 (*British Birds*, Vol. XIII., p. 59), the increase in the number of birds frequenting the Yorkshire coast in summer has been very remarkable.

In 1919 I was told by the climbers at Bempton that during the previous season (1918) a single bird had frequented the cliffs all the summer, but at the time of my visit in July, 1919, they had no evidence of the birds nesting there.

Last year, 1922, eggs were taken at Bempton and there is no doubt that both in 1922 and 1921 the birds bred there and in other places along the coast.

This year (1923) they have taken up their quarters at many places between Bempton and Kettleness. It is, of course, impossible to make an accurate estimate of their numbers, but, excluding the birds at Bempton, there cannot be less than thirty pairs scattered along the coast, and the probability is that there are a good many more. How many of these birds are, or will be, engaged in nesting, it is not possible to say, though from what I have seen of their behaviour at several of their stations, I should say that the majority of them are breeding birds, and this opinion is backed up by what I have heard from other observers, notably Mr. Clay of Filey and Mr. Snowdon of Whitby.

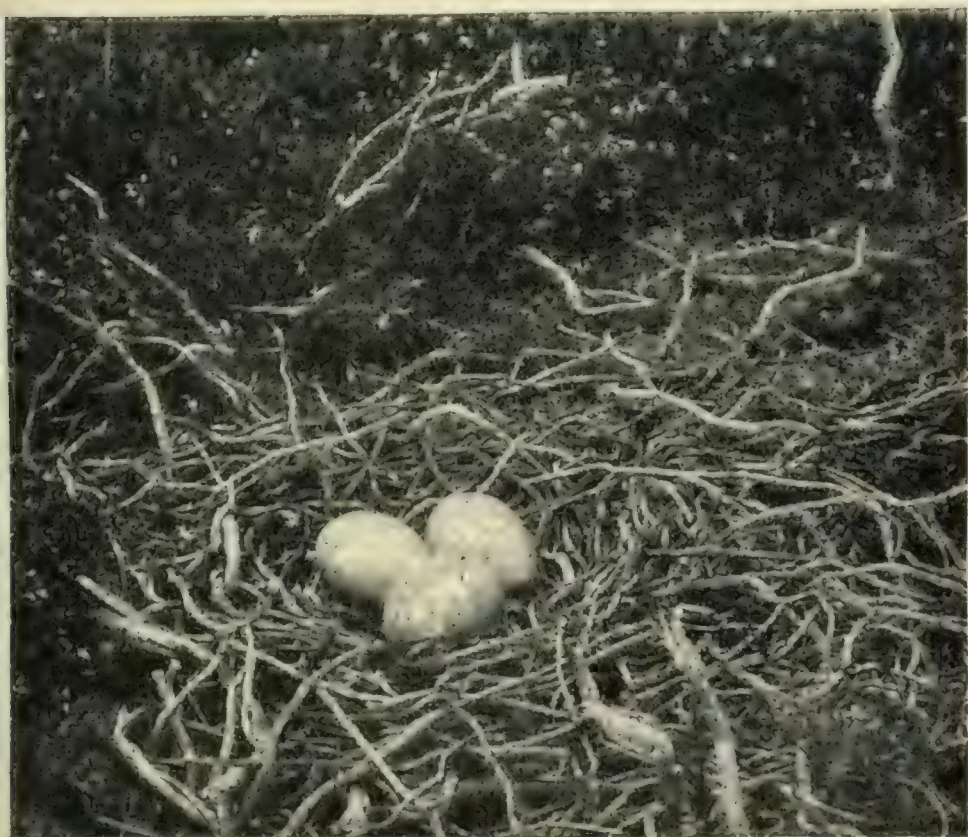
Special protection orders are posted in both the North and East Riding areas, and the credit for this special protection must be given to the Yorkshire Naturalists' Union Wild Birds' Protection Committee.

E. ARNOLD WALLIS.

[Dr. S. H. Long estimated that there were fifteen to twenty pairs on the Bempton Cliffs in 1922 (Vol. XVI., p. 85).—EDS.]

UNUSUAL NEST OF OYSTERCATCHER.

THE accompanying photograph of the nest of an Oystercatcher (*Hæmatopus o. ostralegus*) was taken by me this year (1923) on a heathery flat near the river Dee, near Dinnet, Aberdeenshire. The nest was composed of dead heather stems, taken



by the birds from a near-by patch that had been burnt the season before. I have often known the Oystercatcher to take a few stems of dead heather, but have never before seen such an ambitious nest and it must be most unusual.

SETON GORDON.

GREAT BLACK-BACKED GULL BREEDING IN
SOMERSETSHIRE.

WE do not know if the Great Black-backed Gull (*Larus marinus*) has previously been recorded as breeding in Somersetshire, but in any case it is an event of sufficient interest to be worth noting, seeing that this species is by no means common in the Bristol Channel at any season.

On June 2nd, 1923, we paid a visit to the Steep Holm and noted one of these birds standing on an outlying spur of the

cliff. On climbing to the spot a nest with three young, only recently hatched, was found. They were clothed in a coat of very light grey down, showing no trace of the warm brownish tinge that characterized the dress of the young Herring, and to a lesser degree that of the young Lesser Black-backed Gulls examined during the day. The nest was also considerably larger than those of these latter species.

Identification was definitely established from a "hide" erected a few yards away, from which photographic records were obtained of the adults and young.

On a previous visit made in June, 1911, no birds of this species were seen.

In Glamorganshire a pair or two occasionally breed in the Gower Peninsula.

GEOFFREY C. S. INGRAM.

H. MORREY SALMON.

YELLOW-BROWED WARBLER IN FIFESHIRE.—Miss L. J. Rintoul, who is well acquainted with *Phylloscopus h. præmium* on migration at the Isle of May, watched a bird of this species in her garden at Largo on October 23rd, 1922 (*Scot. Nat.*, 1923, p. 11). Miss Rintoul describes the Yellow-browed Warbler as very restless, bold and fearless, and often driving away much larger birds.

SPREADING OF GREAT SPOTTED WOODPECKER IN ARGYLLSHIRE.—A nest of *Dryobates major* was discovered and the bird photographed in the summer of 1922 by Miss Berry at Glenstriven, Loch Striven (*Scot. Nat.*, 1923, p. 4), which is a small but interesting southern extension of the range of this bird in Argyllshire (*cf. Brit. B.*, XIII., p. 299; XIV., p. 62; XV. p. 274).

LITTLE OWL IN CORNWALL.—Mr. R. E. Moreau informs us that in June, 1922, he saw Little Owls (*Athene noctua*) about the Castle at Tintagel which were probably breeding. No conclusive evidence of the bird breeding in Cornwall has yet been brought forward we believe, though as already announced Little Owls were seen near Padstow at the end of 1918 and even so far west as Helston in December, 1919, as well as in other places in Cornwall in the winter of 1919 (*cf. Vol. XIII.*, pp. 198, 219 and 274).

GARGANEY IN LANARKSHIRE.—Mr. R. W. S. Wilson records (*Scot. Nat.*, 1923, p. 17) a drake *Anas querquedula*, which is a rare bird in Scotland, on April 30th, 1922, at Frankfield Loch.

RED-NECKED PHALAROPE AND GOSHAWK SEEN OFF CO. KERRY.—Mr. A. J. Kennedy states (*Irish Nat.*, 1923, p. 7), that a Red-necked Phalarope (*Phalaropus lobatus*) visited the Tearaght Rock, where it remained for about a quarter of an hour, on October 1st, 1922. So far as we know this species has been recorded in Ireland on only three other occasions outside its breeding haunts.

Mr. Kennedy also states that a Goshawk (*Accipiter gentilis*) had been on the rock "for some time past" and "re-appeared at the end of October and is still on the rock." He also remarks that it is "no trouble to it to kill rabbits and we have watched it put up some fierce fights with Peregrines."

The only reliable record of a Goshawk in Ireland is one of the American form, *A. g. atricapillus*, recorded in *British Birds*, Vol. XIII., p. 31.

UNUSUAL NESTING-SITE OF PHEASANT.—Mr. C. J. Pring informs us that on May 20th, 1923, he found a Pheasant (*Phasianus colchicus*) sitting on twelve eggs in an old Sparrow-Hawk's nest 28 ft. up in a spruce fir, near Lyme Regis, but inside the Devon boundary. (This incident has also been reported independently in the *Field*, June 7th, 1923, by Mr. Taberer.) Similar cases have been reported on many occasions, when old nests of Sparrow-Hawk, Wood-Pigeon, Owl, and squirrels' dreys have been appropriated, at heights ranging from 6 to 30 ft. Two photographs of a nest in a spruce, 22 ft. from the ground are given in the *Birds of Yorkshire*, Vol. II., pl. facing p. 524, and in *Brit. Birds*, Vol. XIII., p. 87, will be found a note on a nest 26 ft. from the ground in an old Sparrow-Hawk's nest, together with references to about a dozen other recorded instances of this habit.



REVIEWS



A Natural History of the Ducks. By John C. Phillips. (London, Longmans.) Four volumes 4to ($9\frac{3}{4} \times 12\frac{5}{8}$ inches). £10 10s. per volume. Vol. I.—Plectropterinae, Dendrocygninae, Anatinae (part). 9 Plates in colour and 9 in monochrome. 27 outline Maps.

THIS work promises to be very useful and interesting to the many lovers of ducks, but it lacks the completeness of a monograph. Mr. Phillips, being unable to separate the ducks and geese on systematic grounds, arbitrarily includes the sub-family Plectropterinae (spurwings) because some of its members "ordinarily come under the category of ducks," while he excludes all other geese as well as the swans; so that the work treats of only part of the family Anatidae. Neither is the systematic portion full or detailed, and it seems to us rather unfortunate that the opportunity of making a more complete monograph of these interesting birds has been lost.

Chief attention has been directed to habits, and these are described in each species under such headings as wariness, daily movements, flight, gait, swimming and diving, perching, association with other species, flocks, voice, food, courtship and nesting, status, enemies, food value, "hunt," "behavior" in captivity. This part of the work seems to have been well done on the whole, though here as well as in the very full and detailed accounts of distribution Mr. Phillips has not always been careful in his choice of "authorities."

In this connection we may instance his quotation from F. O. Morris (well known to have been one of the most indiscriminating of writers) of records of occurrences of Egyptian Geese in this country. Had Mr. Phillips read the article in Yarrell (4th ed., Vol. IV., pp. 300-303) he would have realized that even Hawker, who was responsible for the statement that eighty appeared in Hampshire, evidently considered this mere gossip and had no doubt that the birds (probably eight) were due to importation, while a glance at our county avifaunas would have convinced him that the numerous other occurrences of Egyptian Geese in the British Islands can without doubt be ascribed to the escape of semi-captive birds or their progeny.

The only other species of special interest to students of British birds in this volume are the Common and Ruddy Sheld-Ducks, of which the author gives long accounts. Of the adults of the former species coloured figures are given, but these are somewhat wanting in brightness, especially in the colour of the chestnut band. Mr. Fuertes, the artist who is responsible for all the plates save two in this volume, has a distinctive bold style, and most of the coloured plates are very effective, and while in some cases the intense blue he has given to water and sky rather detract from the colouring of the birds, in others this has the reverse effect. We welcome a plate (black and white) of nestlings by Mr. Allan Brooks, and we trust that in the coming volumes figures will be given of less well-known plumages, such as juvenile and eclipse, rather than full-plumaged adults.

Attention must be drawn to the Introduction, where much that is of interest will be found. On page 14 Mr. Phillips states that it is "quite certain" that in most of the common northern species of ducks

the females and young go farther (south), while the males may even stay in a more northerly winter area. We do not deny that this may be so, but we should have been grateful for the evidence upon which the assertion is based and we hope that this will be given under the species concerned. Another interesting point to which attention may be drawn is the statement on page 19 that the experiments of Goodale (no reference given) show that the removal of the sexual organs in the male produces a failure to assume the eclipse plumage, but does not affect the assumption of the full plumage. From this Mr. Phillips argues that the full plumage is the primitive condition and the eclipse a recently developed one, but this seems to leave out of the question the theory of recapitulation in the young of past stages in the adult.

In concluding this notice we must express our gratitude to Mr. Phillips for enriching ornithological literature by a work of this character, but it must be said that to our idea the published price of the volume considering its size, the temporary character of the binding and the number of coloured plates, is very high, and the reason for this is probably on account of its having been produced in America, where costs still rule even higher than in this country.—H.F.W.

The Great Waxwing Invasion of 1921. By James Ritchie, M.A., D.Sc., F.R.S.E. Reprinted from *The Scottish Naturalist*, 1922, pp. 133-142, 193-201; 1923, pp. 23-29.

UNDER this title Dr. Ritchie has given a very complete account of the immigration of Waxwings (*Bombycilla garrulus*) which commenced about November 10th, 1921, and continued until about December 1st.

This migration was chiefly noticeable rather further north than is usual in invasions of this species, the greatest numbers being observed in south-east Scotland and north-east England, while a considerable number was noted between the Forth and Moray Firth, some in Ross, Sutherland and Caithness, quite a number in the Orkneys and several in the Shetlands. The invaders also spread far to the west, and between 50 and 60 appeared at Stornoway, Lewis, on November 18th; we believe that the Waxwing has been reported from the Outer Hebrides on only three previous occasions.

Altogether Dr. Ritchie has had records of about one thousand individuals, which does not seem a great number, but of course represents only a proportion of the birds which must have visited us. After the first week in December no large flocks were reported and their total numbers dwindled, only thirty being seen in January, nineteen in February, two in March and five in April, these last being seen in Cumberland between the 8th and 10th.

The Abbreviated Inner Primaries of Nestling Woodpeckers. By James P. Chapin. Reprinted from *The Auk*, 1921, pp. 531-52.

ATTENTION should have been drawn before in these pages to an interesting observation made by Mr. Chapin, a well-known American ornithologist, on the remarkably small size of the inner primaries of Woodpeckers in their juvenile plumage. By permission of the author and also of the editor of *The Auk* we are enabled to copy here the figures given of the wings of an adult and juvenile Green Woodpecker (*Picus viridis*) showing these two dwarfed inner primaries. Mr. Chapin found the same two primaries dwarfed in the Greater Spotted Woodpecker (*Dryobates major*). In a later communication (*Auk*, 1922, p. 299), Mr. Chapin points out that he had overlooked a note published in

the *Journal für Ornithologie* (1916, pp. 155-6), in which Dr. A. Heinroth described the same conditions in the young of the Lesser Spotted Woodpecker (*Dryobates minor*), the Black Woodpecker (*Dryocopus martius*) and the Wryneck (*Jynx torquilla*).

For a complete list of the species of *Picidæ* juveniles, which Mr. Chapin has examined, we must refer the reader to the original paper, but it may be mentioned that in many species only one primary was found to be dwarfed, while in several there was no reduction.

It has been already pointed out (*Practical Handbook*, Vol. II.), that the outermost primary in juveniles of the British Woodpeckers and the



WING OF THE GREEN WOODPECKER (*Picus viridis*).

A. Adult. B. Juvenile showing two abbreviated inner primaries.

(Reproduced by permission from *The Auk*, 1921, p. 534.)

Wryneck is considerably longer than in the adult, and the dwarfing of the inner primaries is a further interesting difference in the wings of the young and old. Mr. Chapin states that the inner primaries are retained only a short time and are in fact shed almost before the outermost primary is fully grown.

Mr. J. T. Nichols has suggested that the gap formed in the wing by the dwarfed primaries is of utility to the young in the limited space of the nesting hollow, and it has been demonstrated by photographs that young birds do in fact while being fed, push their heads through this gap in one another's wings. But this habit seems merely a result of there being a gap in the wing and can scarcely be brought forward as the cause of the dwarfing of these feathers.



LETTERS



DOES THE BLACK KITE TAKE LIVE FISH.

To the Editors of BRITISH BIRDS.

SIRS,—It would be interesting to know if any ornithologists hold the view that the Black Kite (*Milvus m. migrans*) attempts to take *live* fish.

I have frequently watched these birds on Lac Leman and came to the conclusion that their prey is dead or floating helpless when taken. My opinion is based on the fact that they never miss their object, and also that they dip their talons so lightly on the surface of the water.

Whilst patrolling the lake in search of food the Black Kite maintains a steady and easy flight at from 20 ft. to 50 ft. above the surface and swoops down suddenly without checking its progress. J. B. WATSON.

JAY'S HOTEL, ALDEBURGH-ON-SEA, 28th May, 1923.

[It must be remembered that both Lake Leman and Lake Neuchatel are well stocked with fish, and that large numbers of small fry may be seen basking at or near the surface of the water, so that there is a great probability that live fish are, occasionally at any rate, picked up by the Black Kites.—F.C.R.J.]

THE NAME OF THE BRITISH SONG-THRUSH.

To the Editor of BRITISH BIRDS.

SIRS,—As we examine the literature of British birds, book by book, we find something of nomenclatural interest previously overlooked in nearly every case. We included the majority of our items in our last notes (*Austral Avian Record*, Vol. V., Nos. 2-3, Feb. 21st, 1923), but already we have noted a matter of more than casual interest. Although we have endeavoured to examine the majority of books dealing with British birds so that we could suggest that we were reaching finality in a majority of cases, recent research has not encouraged us. Thus, a well-known little book mentioned in a bookseller's catalogue, and in every library, viz., Turton's *British Fauna*, appears to have been left entirely unexamined. Upon examination we noted two or three names which needed review, but a most important one was seen on p. 35 where the name *Turdus ericetorum* was proposed for the "Heath Thrush" figured and described by Lewin in his *British Birds*, Vol. II., pl. 63. The description undoubtedly referred to the Song-Thrush and since *Turdus musicus* of Linné was shown to have been given to the Redwing in 1758, the Song-Thrush has been known by the name of *Turdus philomelos* Brehm. The latter name dates from 1831 while Turton's name was given in 1807.

Upon reference to Lewin to verify the name, the "Heath Thrush" was not found in that book, but upon inquiry a second edition of Lewin was found where the "Heath Thrush" is correctly figured. The two editions of Lewin are quite different works in every way, new figures and additional species being added in the latter. Full details will be found in Mullens and Swann's *Bibliography of British Ornithology*, which is one of the best reference works yet prepared, and one which has not been well studied by many British ornithologists. It should be in the possession of every one at all interested in British birds.

The "Heath Thrush" was named as being smaller than the Song-Thrush, with a thicker neck and shorter tail and different habits, etc., items similar to those accepted in the case of the Willow-Tit by present day ornithologists. At present there will be little hesitation in accepting the "Heath Thrush" as being identical with the Song-Thrush, and hence the name to be used for the latter will be

Turdus ericetorum Turton.

As the name was given to the British bird the name of the British subspecies will be

Turdus ericetorum ericetorum Turton

instead of

Turdus philomelos clarkei Hartert

while the continental subspecies will bear the name of

Turdus ericetorum philomelos Brehm

instead of

Turdus philomelos philomelos Brehm.

GREGORY M. MATHEWS.
TOM IREDALE.

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 1 (new series), Aves, etc., 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS.

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND

F. H. L. WHISH,

TAXIDERMIST,

LYMPHAM, SOMERSET,

Specialises in the setting-up of Birds. No work leaves the premises lacking artistic handling and accuracy in detail; the charge for such work being exceedingly moderate.

A SELECTION OF H. F. & G. WITHERBY'S NEW BOOKS

The Deer and Deer Forests of Scotland

Historical, Descriptive and Sporting. By ALEXANDER I. McCONNOCHIE, F.Z.S. Royal 8vo. Numerous photographs. 25/- net

Record Bags and Shooting Records (2nd Impression)

Compiled in many cases from hitherto inaccessible sources and private records, to which are added sections upon marksmanship, and the speed and weight of birds. By HUGH S. GLADSTONE, M.A., F.R.S.E., F.Z.S., M.B.O.U., Author of "The Birds of Dumfriesshire," "Birds and the War," etc. Demy 8vo., with photographs and reproductions from old engravings. 15/- net

The Highlands with Rope and Rucksack

Introducing a sports-ground practically unexplored by cragsman and tourist; with accounts of climbing and tramping by peak and pass. By ERNEST A. BAKER, D.Lit., M.A., Author of "Moors, Crags and Caves of the High Peak," "The Netherworld of Mendip," etc. Demy 8vo., numerous photographs. 12/6 net

A Naturalist in Hindustan

By MAJOR R. W. J. HINGSTON, M.C., M.B., I.M.S., Author of "A Naturalist in Himalaya." Demy 8vo. With photographs and sketches. 16/- net

The Badger, Afield and Underground

A Monograph for the Sportsman and Naturalist, containing every known detail in this animal's life, by day and night, with observations bearing on fox-hunting. By H. MORTIMER BATTEN, F.Z.S., Author of "Habits and Characters of British Wild Animals," etc. Demy 8vo. Photographs and sketches. 8/6 net

Windjammer Yarns

Incidents in the life of a South African seaman in the Wooden Ships and Steam Tramps of Fifty Years ago. By CAPTAIN ALEX ANDERSON. Demy 8vo., with contemporary photographs. 12/6 net

From Golden Gate to Golden Sun

A Record of Travel, Sport and Observation in Siam and Malaya. By HERMANN NORDEN. Fellow of the Royal Geographical and American Geographical Societies. Demy 8vo., numerous photographs. 15/- net

A Monograph of the Pheasants

A sumptuous work, compiled from the Author's own observations and from all published sources. By WILLIAM BEEBE. Four Vols., Royal 4to. Numerous coloured plates, photogravures and maps. £12 10s. net per vol.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

AUGUST 1.
1923.

Vol. XVII.
No. 3.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

"The kind of Nature Magazine we have wanted for some time."—

Westminster Gazette.

"We wish Dr. Renshaw every success."—*The Ibis.*

Write to-day for Illustrated Prospectus from the Editor, c/o

SHERRATT & HUGHES, 34, Cross Street, Manchester
DO IT NOW.

FOR SALE

LORD LILFORDS COLOURED FIGURES OF THE BIRDS OF THE BRITISH ISLANDS

FIRST EDITION 1885-1897. 7 Vols. Royal 8vo.
With Portrait and 421 Beautifully Coloured Plates.
Handsomely Bound in Full Green Morocco, Gilt tops.

PRICE—£57 10s. 0d. or nearest offer.

Address: F. c/o "BRITISH BIRDS" OFFICE.

NOW READY - Free on Application

A CATALOGUE OF A SELECTION OF BOOKS
on
**BRITISH AND FOREIGN BIRDS
AND THEIR EGGS.**

FRANCIS EDWARDS,

ANTIQUARIAN BOOKSELLER,

83, High Street, Marylebone, London, W.1.

OUR BIRD FRIENDS

This delightful volume is written in a pleasant chatty manner, yet accurate in its dealings with such phases of bird life as are likely to attract attention and set the reader observing and enquiring for himself.

THE ADVENTURES OF COCK ROBIN AND HIS MATE.

The Robin's life story, and that of many of his natural history neighbours, is here clearly and cleverly illustrated by pen and picture. The camera and a good deal of hard work on the part of the author have produced a beautiful picture gallery of nature to illustrate the sound natural history knowledge given in this book.

By **RICHARD KEARTON, F.Z.S.**

EACH
6/- Net.

Both volumes are delightfully illustrated with over 100 half-tone reproductions of photographs taken direct from nature.

Cassells

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 3, VOL. XVII., AUGUST 1, 1923.

	PAGE
Seventeenth Century Names for some British Birds. By Hugh S. Gladstone	50
Recent Changes in the Birds of Scilly. By H. M. Wallis ...	55
Notes :—	
Nest occupied by Raven, Buzzard and Peregrine in successive years (Dr. H. J. Moon)	59
Status of the Wood-Lark in Somerset (W. H. Thorpe) ...	59
Large Clutch of Spotted Flycatcher's Eggs (Dr. H. J. Moon)	59
Dipper Nesting away from Water (Dr. H. J. Moon)... ..	59
Swallow Ringed in South Wales found in Belgian Congo (H. F. Witherby)	60
Curious Mass of Bones in a Barn-Owl's Hole (Miss Clemence M. Acland)	60
Clutches of Five Eggs of Peregrine Falcon (Major W. M. Congreve)	62
Abnormal Clutch of Kestrel's Eggs (Rev. F. C. R. Jourdain)	62
Notes on Bewick's Swan in Glamorganshire (Miss Clemence M. Acland)	63
Dive of the Great Northern Diver (H. W. Robinson) ...	64
Probable Second Brood of Stone-Curlew (Major Cecil Smeed)	65
Little Gulls and Little Stint in Norfolk in June (T. A. Coward)	66
Great Black-backed Gull Breeding in Somerset (Rev. F. L. Blathwayt and Stanley Lewis)	66
Great Black-backed Gull killing Razorbill (H. W. Robin- son)	67
A Decorated Moor-hen's Nest (Major W. M. Congreve) ...	68

SEVENTEENTH CENTURY NAMES FOR SOME
BRITISH BIRDS.

BY

HUGH S. GLADSTONE.

IN 1921 I purchased a copy of Conrad Gesner's *Icones Animalium . . . Tiguri* (3 vols. in one), 1560. My interest in this particular copy was at first aroused by a manuscript inserted at the end which I thought might be a copy of William Turner's *Natural History of Fishes** of which I believe no copy is extant: on investigation, however, this manuscript has proved to be but a transcript of a letter from Turner to Gesner, which is printed in another of the latter's earlier publications.† My copy apparently belonged originally to one Nicholas, and subsequently to Bernard, Carter; it is of unusual interest since one of these persons, probably the former, has been at the trouble to add very carefully the English names of the birds and has, in a few cases, supplied some notes. These additions are in Latin and were made about 1600: many of the names thus given for the birds are interesting as showing the antiquity of several of our present-day local names and some of the names would appear to be new. I have given the page reference to the volume dealing with birds, the Latin name as printed and have translated all the manuscript notes which have been added. It must be observed that in some cases Carter has wrongly identified Gesner's illustrations, but this is perhaps not surprising when their crudeness is remembered:—

- P. 3. AQUILA: An Eagle.
 6. AQUILA ANATARIA: A Bald-bushard.
 7. ASTUR: A Gos-hauke; Male, a Tercell of Gos-hauke.
 ACCIPITER MINOR: A Spar-hauke or Sparrow-hauke.
 8. TINNUNCULUS: A Kestrill, or Wind-hover, a Stanegall or Steingall.
 MILVUS: A Kite; a Gleid; a Puttocke.
 9. BUTEO: A Bushard.
 10. FALCO: A Falcon; Male, a Tercell Gentle.

* *Auct.* J. Bale: *Scriptorum illustrium majoris Brytanniæ* [1557-9], p. 697, and Thomas Moffet's *Health's Improvement*, ed. by Mr. Oldys (1746), p. xiv.

† Gesner, Conrad. *Historia Animalium . . . lib. IIII. . . Tiguri:* apud C. Froschoverus, 1558: pp. 1294-7.

- P. II. ÆSALON: A Merlin; Male, a Jack-merlin.
 DENDROFALCUS: A Hobbie.
13. LANIUS: Hawk-Robbin unless I am mistaken a solitary bird.
17. *VESPERTILIO: A Batt; a Reermouse or a Flindermouse.
19. GRUS: A Crane.
20. PARADISI AVIS: The Bird of Paradise.
21. CORVUS: A Raven which lives on prey.
23. CORNIX: A Dung-hill Crow; or a Carion-crow.
24. MONEDULA: A Daw; or a Jack-daw; a Cadesso; a Chough; a Money-stealer.
25. †CARYOCATACTES: A Rouke; perhaps from its hoarse cry.
26. GRACULUS CORACIAS: A Cornish Chough.
 PICA GLANDARIA: A Jay.
28. PICA: A Py; a Magg-py; a Haggester; a Py-annet; a Nan-py; a Piot.
 TURDUS MINOR: A Whindle; a Redd-wing; a Bow-thrush.
30. TURDUS VISCIVORUS: A Misle-bird; a Jarre, from its hoarse cry.
31. UPUPA: I once saw a little bird in every respect like this figure. [It was] however dead; it was called by men the Whooping-bird and is considered as portentous.
32. MERULA: An Owsle; a Black-bird.
33. ‡MERULA TORQUATA: A Fieldfarr.
34. CUCULUS: A Cuckoo; or a Goake.
 STURNUS: A Starling; a Stadle or a Sheep-starlin.
36. PICUS VIRIDIS: A Wood-pecker; a Hewhole; or a Yough-all; a Hickway.
36. §PICUS VARIUS: A Nutthacke.
37. ||ORIOLOUS: A Woodpecker; or a Speiught.
 ¶PICUS CINEREUS: A Nuttrobber.
 CERTHIAS: Climbtree; a Climber.
38. IYNX: More properly a Nutt-hack and by some [called] a Glenn-bird or a Wry-neck; a bird of magic, etc.

* In the sixteenth century the Bat was classed as a bird.

† The illustration is that of a Nutcracker.

‡ The illustration is that of a Ring-Ouzel.

§ The illustration is that of a Spotted Woodpecker.

|| The illustration is that of a Golden Oriole.

¶ The illustration is that of a Nuthatch.

- P. 38. PICUS MURALIS : A Climber the less.
 PSITTACUS : A West-India-Parret.
39. PSITTACUS : A Parret.
40. LOXIAS : The Wimble bird.
41. PASSER : A Sparrow.
42. EMBERIZA : A Bunting.
43. CARDUELIS : A Goldfinch.
 LINARIA : A Linet.
44. FRINGILLA : A Caff-finch.
 ACANTHIS : A Thistlewarpe.
 CITRINELLA : A Yellow-ambar.
45. CHLORIS : A Greenfinch.
 PARUS MAJOR : An Aup.
 PARUS CAERULEUS : A Titt-mouse.
47. PARUS MONTICOLA : An Ox-eye.
48. LUSCINIA : A Nightingale.
 ERITHACUS : A Redd-breast ; a Robin-ruck or a
 Robin-redd-breast ; a Ruddock.
49. PYRRHULAS : A Bull-finch.
 TROGLODYTES : A Wren or a Jiny-wrenn.
51. HIRUNDO : A Swallow.
 CYPsilUS : A Swift.
52. HIRUNDO RUSTICA : A Martin.
 GALLUS : A Cocke ; the young, Cockerells.
53. GALLINA : A Henn whose young [are called]
 chickens ; the females before they become
 adult [are called] Pullets.
54. CAPUS : A Capon ; the young are called Caponets.
55. PAVO : A Peacock.
56. GALLOPAVUS : A Turkey or a Ginney.
57. COLUMBA VULGARIS : A Dove, a Culver, or a
 Pigeon.
 COLUMBA ANGLICA : A Ruffooted Pigeon or a
 Tame Pigeon of many species.
58. UROGALLUS : A Cocke of the Wood.
61. MELEAGRIS : A Ginny-henn.
64. PERDIX MAJOR : French Partridge.
 PERDIX MINOR : A Partridge.
65. *LAGOPUS : The white Partridge.
66. PALUMBUS MINOR : A Stockdove.
 PALUMBUS MAJOR : A Ringdove ; a Wood-pigeon ;
 often a Cowshott.
 TURTUR : A Turtle-dove.

* The illustration is that of a Ptarmigan.

- P. 67. OTIS : A BUSTARD.
 70. ALAUDA : A Lerke.
 *ALAUDA CRISTATA : A Tit-larke badly drawn.
 71. COTURNIX : A Quail.
 72. ANSER FERUS : A Wilde Goose amongst which it seems there is an even smaller species of Goose [called] in England : Brante-geese.
 73. ANSER : A Goose ; male, a Gander and in the north a Stegg.
 73. ANAS : Male, a drake ; female, a ducke.
 74. ANAS FERA : A Drake.
 77. QUERQUEDULA : A Teale.
 81. CYGNUS : A Swan.
 84. CORVUS AQUATICUS : A Cormorant.
 85. MERGANSER : A Bergander.
 86. ANSER ARBORUM : A Goose.
 87. MERGUS : A Cormorant.
 88. COLYMBUS MAJOR : The great Didopper or after the Dutch Arse-foote ; a Loune.
 89. COLYMBUS MINOR : A Dapchick ; a Puffin ; a Didopper.
 91. FULICA : A Coote.
 92. †PELECANUS : A Shoveler.
 93. ‡RECURVIROSTRA : A Rheeme.
 95. LARUS : A Sea-gull ; a Cobb ; a Gray-gull.
 96. STERNA : A Skirre.
 97. HIRUNDO SYLVESTRIS : A Martin.
 99. CAPRA : A Lapp-winge and by some [called] a Teuwhit or a Greene Plover, but the crest is extremely badly drawn nor is the beak well [done].
 100. ISPIDA : A Kingsfisher.
 101. GALLINULA : A Cock-snite or a Judd-cock.
 ERYTHROPUS : A Redd-shanke or a Touk.
 110. RUSTICULA : A Woodcock ; [called] by fowlers a Small-cock.
 112. GALLINAGO. : A Snite or a Snipe.
 114. §LIMOSA : A Rebeck.
 117. ARDEA : A Herne or Heron or Heronshaw.

* The illustration is that of a Crested Lark.

† The illustration is that of a Spoonbill.

‡ The illustration is that of an Avocet.

§ The letterpress accompanying the illustration would seem to indicate that Gesner refers to the Greenshank and Redshank.

- P. 120. ARDEA STELLARIS : A Bittern or rather Bouterne ;
a bird [with] resounding [cry].
121. CICONIA : A Stork.
124. MOTACILLA : A Wagg-taile, a Dish-washer, a
Seed-bird, a Wagg-stert.
MOTACILLA FLAVA : A Yellow Dish-washer, etc.
135. BERNACLA : and also [called] in some parts Rode-
goose or Coal-goose. The legs, thighs and
feet [are drawn] longer than they should be.

I regret that I have not been able to ascertain anything about Nicholas, or Bernard, Carter the previous owners of the book now in my library, but that one of them possessed a remarkable knowledge of birds—for the period at which he lived—is evidenced by the list of 173 names supplied by him.

It may be remarked here that, on the preliminary page “ad lectorem” of the volume dealing with birds, Gesner gives two names for the Nightjar on the authority of William Turner—namely Evechur and Horsik—which are of more than passing interest since Turner, in his *Avium Præcipuarum* 1544, gives no English equivalent for *Caprimulgus*.

It will be of interest to add that Gesner gives the following names as in use in England : p. 22, Craye [=?Rook] ; p. 80, Puphin or Puffin [*auct.* J. Caius] ; p. 96, Sterna or Stirna [=Tern] ; p. 110, Wodcoc [=Woodcock] ; p. 113, Curlew or Whaup ; p. 129, Osprey [*auct.* J. Caius] ; p. 131, Doterelle [*auct.* J. Caius] ; p. 135, Bernacla, Bernicla, Bergander, Branta, Brendin ; and the following names as in use in Scotland : p. 61, Ane blak cok, ane grey hen ; p. 61, Ane mwyrcock [=Grouse] ; p. 82, Clakis [=Geese of the sea] ; p. 82, Capercalze ; p. 83, Gustarda [=Bustard] ; p. 83, Solendguse [=Gannet]. Some of these names occur in Gesner’s *Historiæ Animalium* . . . *Lib. iii. qui est de Avium* : 1555 : where he gives an index to two hundred English and Scottish names of birds of which, however, several are to be found in the publications of earlier authors such as Hector Boethius.

RECENT CHANGES IN THE BIRDS OF SCILLY.

BY

H. M. WALLIS.

IN the *Zoologist* for July, August and September, 1906, Messrs. James Clark and F. R. Rodd dealt exhaustively with the *avis* of the archipelago. Carew's Survey, 1841, the records of a Mr. Pechell from 1849 to 1870 were laid under contribution. The Rodd collection at Trebartha and Mr. F. R. Rodd's diaries during five visits between 1859 and 1870 were cited; also his uncle's diaries and unpublished material. The Tresco game-book and collections were used, and assistance afforded by Mr. F. Jackson, and the still surviving veteran Mr. C. J. King of St. Mary's, Scilly. Boatmen, gardeners and Mr. Augustus Smith's gamekeeper lent their aid. The three articles cover the ground and will always be valuable for reference.

But changes were even then taking place and are still going on, and it is to some of these that I propose to call attention.

My two short visits this spring do not entitle me to do more than indicate such changes of status in the record as are obvious, more especially in the residents.

Thus, Blackbird (*Turdus merula*) and Song-Thrush (*T. ph. clarkii*) are still abundant, but the Mistle-Thrush I neither saw nor heard. A Skylark (*Alauda arvensis*) was singing, and possibly breeding. I saw but one. Wheatears (*Enanthe cenanthe*) seem to have increased and are breeding. Stonechats (*Saxicola t. hibernans*) were very abundant, Redbreasts (*Erithacus rubecula*) were present, and almost certainly resident, but, while some behave like our birds and watch the spade, others are as secretive and invisible as the Continental form in a Swiss glen. Hedge-Sparrows (*Prunella modularis*) are very abundant, also Wrens (*Troglodytes troglodytes*), which nest everywhere. I identified *no* Warbler of any species. The Sedge-Warbler, which "bred freely on Tresco" in 1906, I neither saw nor heard there in April, May or June this year; nor the Grasshopper-Warbler on Samson. Both birds advertize their presence pretty freely when present.

The Golden Oriole was reported to me as having appeared on May 15th. I heard a broken song on Tresco among tall pines which I should have liked to have identified. I saw no Shrike, Flycatcher, Nuthatch, Creeper, Wagtail or Woodpecker.

nor any species of Tit except *Parus major*, which was feeding young on Garrison, and seen and heard on Tresco and Tean. Swallows (*Hirundo rustica*) had three nests on Tean and were seen on St. Mary's; House-Martins (*Delichon urbica*) on the same island; but I did not actually see nests. There were no Sand-Martins, and in 1906 they are recorded as non-resident. Swifts (*Apus apus*) have apparently grown more common. Though not exactly abundant, one sees them daily; I cannot say they were breeding, but they seemed at home. In 1906 they were regarded as occasional birds of passage. I saw no Goldcrest. The Chaffinch has not yet made good. I saw none. The Greenfinch (*Chloris chloris*) was singing and calling in Tresco gardens in April, May and June, and presumably was breeding. Linnets (*Carduelis cannabina*) were very abundant on all the Islands in flocks. There were no other finches. Corn-Buntings (*Emberiza calandra*) were present, but few. There were no Yellow Buntings, Reed-Buntings, or Tree-Sparrows, but many House-Sparrows (*Passer domesticus*) were to be seen on St. Mary's.

Starlings (*Sturnus vulgaris*) were breeding. Mr. C. J. King tells me this bird did not breed on Scilly before 1911-1913. They were only winter visitors at Falmouth in 1886 and were unknown there in 1850-1860 (*teste* Mr. G. H. Fox, Falmouth), even in winter.

I saw no Raven, Chough, Carrion-Crow, Rook, Jackdaw, Magpie or Jay. The changed status of the Carrion-Crow is very marked. In 1906 this bird is reported as "breeding regularly on all the outer uninhabited Islands in spite of repressive measures." Mr. King now knows of no Crows nesting, nor did I hear nor see a bird.

I heard a Nightjar (*Caprimulgus europæus*) churring in full sunlight at mid-day on Tresco. Mr. King has photographed this bird at the nest on Scilly. In 1906 "the Kestrel (*Falco tinnunculus*) was well in evidence all the year round." I saw a single bird.

Sheld-Duck (*Tadorna tadorna*) were rare in 1906, now they breed around Tresco Pool in a tolerated, or semi-protected status, for owing to the persecution of the Greater Black-backed Gull (*Larus marinus*) they would never rear a duckling unless their eggs were dug out and hatched under hens. A few pairs—very few—of Mallard (*Anas platyrhynchos*) are still about, possibly breeding.

The first known nest of the Wood-pigeon (*Columba palumbus*) seems to be Rodd's record for 1873. He refers to it (1906) as resident in "greatly increased numbers." I noticed

one pair, or maybe two, on each visit to Tresco Gardens, and heard a Stock-Dove (*C. ænas*) at the same place. I flushed a single Rock-Dove (!) on Annet, an uninhabited island, the most remote and southerly of the archipelago. The bird rose close to me from ground riddled with the burrows of the Manx Shearwater (*Puffinus puffinus*). It had a pure white rump, and some white on its secondaries. What a tame pigeon was doing there among a thousand gulls I do not know. There seemed no Turtle-doves on the islands.

In 1906 the Land-Rail was a breeder. We neither heard nor saw it this year. One pair of Moorhens (*Gallinula chloropus*) were seen in May, they had small young then. Rodd records that this bird first became conspicuous in the fifties, and soon grew common, breeding freely around the Abbey Pools, etc. But there were fewer Great Black-backed Gulls then than to-day.

In 1841 the Turnstone (*Arenaria interpres*) was evidently a rarity. By 1863 it had become, what it is to-day, one of the commonest shore birds on the Scillies "*in autumn and winter*" (sic). In 1877 "in some places flocks were common throughout the summer months." Then they were reported to be breeding. "Clark believes that they have bred lately." (*Zool.*, p. 337). Messrs. Jackson and C. J. King are cited for this. But the latter in a recent letter to myself, July 2nd, 1923, repudiates this, disclaiming responsibility for this statement. To-day, Turnstones in a great variety of plumage, and in flocks of seventeen or so, could be seen daily on Annet, Tean and outlying islands during June. Whimbrel (*Numenius phæopus*), too, have changed and rechanged their routes. Between 1856-1867 only four were killed. The species had been fairly abundant earlier. I saw thirty in one flock last June.

Terns, once very abundant breeders, are now scarce. Roseate and Sandwich no longer resort to the Scillies to nest. The Lesser has not nested there within human memory. The Arctic (*Sterna paradisæa*) has grown very scarce and the Common Tern (*S. hirundo*) is found upon a few skerries. All this has occurred without human agency, so far as one can see, and concurrently with the inordinate increase of other predacious species. Black-headed Gulls and Kittiwakes have ceased to breed on the islands. What is the operating cause? Shooting and egging have little or nothing to do with it. I believe the reason is the growth of the colonies of the Great Black-backed, Lesser Black-backed (*L. f. affinis*) and Herring-Gulls (*L. argentatus*).

Taking the Great Black-backed first, as a notorious thief and murderer of smaller birds, in 1906 this species is reported as "resident, but in limited numbers." "Eleven nests were found." This year Mr. C. J. King estimates the stock at three hundred breeding pairs, and will not say that this census is complete. Sixty adult birds were shot at the nests in a single day on Annet alone, and forty-five bodies recovered, which sounds like butchery and extermination, but, personally, I, who never draw trigger, can but rejoice. The condition of Annet Island, strewn with the corpses of murdered Shearwaters and Puffins (*Fratercula arctica*) was pitiful to see. If the Great Black-backed Gulls could be reduced to, say, twenty pairs, and induced to breed upon the outer rocks, the unfortunate Shearwaters might have a chance to maintain their numbers, but such destruction cannot be indefinitely prolonged.

NOTES

NEST OCCUPIED BY RAVEN, BUZZARD AND PEREGRINE IN SUCCESSIVE YEARS.

IN 1921 I found a nest of the Raven (*Corvus c. corax*) near Howtown, Westmorland, containing three young.

In 1922 the nest was occupied by Common Buzzards (*Buteo b. buteo*), and in 1923 by Peregrine Falcons (*Falco p. peregrinus*).
H. J. MOON.

STATUS OF THE WOOD-LARK IN SOMERSET.

IN view of the statement in the *Practical Handbook* that the Wood-Lark (*Lullula a. arborea*) is on the decrease as a British breeding bird, I think it may be worth recording that I knew of a nest this year on the Worlebury Hill near Weston-super-Mare; the birds were very tame and consequently easily observed and photographed; there were two young which left the nest on July 4th.

The Rev. F. L. Blathwayt informs me that although he was very frequently in Weston between 1897 and 1908 he never met with the bird anywhere in the district. It seems very probable therefore that the bird is on the increase in this part of Somerset, as last autumn I also met with a family consisting of parents and three young birds in the neighbourhood of Bleadon, though I have not yet any definite breeding record for that particular locality.

W. H. THORPE.

LARGE CLUTCH OF SPOTTED FLYCATCHER'S EGGS.

ON June 25th, 1923, I found a nest of the Spotted Flycatcher (*Muscicapa s. striata*) containing nine eggs, near Poolley Bridge, Westmorland. They were all similar in type, and despite careful observation for several days I never saw a second female bird.

H. J. MOON.

DIPPER NESTING AWAY FROM WATER.

ON June 1st, 1923, I found a nest of the Dipper (*Cinclus c. britannicus*) near Patterdale, Westmorland, built in the wall of a disused byre, over one hundred yards from the nearest water.

H. J. MOON.

SWALLOW RINGED IN SOUTH WALES FOUND IN
BELGIAN CONGO.

SOME time ago I heard from Mr. G. Palman, a Swedish medical missionary at Matadi, Belgian Congo, that a native had found a Swallow bearing one of the *British Birds* rings "in the upper eastern corner of Luozi district in Belgian Congo about $4^{\circ} 5'$ south latitude and $14^{\circ} 15'$ east longitude in December, 1922, about the 20th."

The number on the ring was evidently wrongly quoted, so I wrote asking Mr. Palman to send me the ring, which he has now very kindly done.

The ring is numbered F.W.39 and this was put on a nestling Swallow (*Hirundo r. rustica*) at St. Nicholas, near Cardiff, on July 31st, 1921, by Miss C. M. Acland.

From the date on which it was found we may assume that this bird was in its winter quarters and was not on the way still further south. It does not, therefore, give us a definite indication of the route by which some British-bred Swallows reach South Africa.

The record is, however, very interesting and taken in conjunction with the seven records from South Africa (see Vol. XVI., pp. 81-84, 284), the nearest of which was some 1,700 miles to the south-east, shows how widely separated may be the winter quarters of individuals of the same species, whose breeding-quarters are nevertheless comparatively near each other.

H. F. WITHERBY.

CURIOUS MASS OF BONES IN A BARN-OWL'S HOLE.

WHILST searching for an Owl's nest, and inspecting a number of likely looking sites, a Barn-Owl (*Tyto a. alba*) was seen to fly out of a hole in the top of a broken branch in an old walnut tree, at a height of about 20 ft. from the ground.

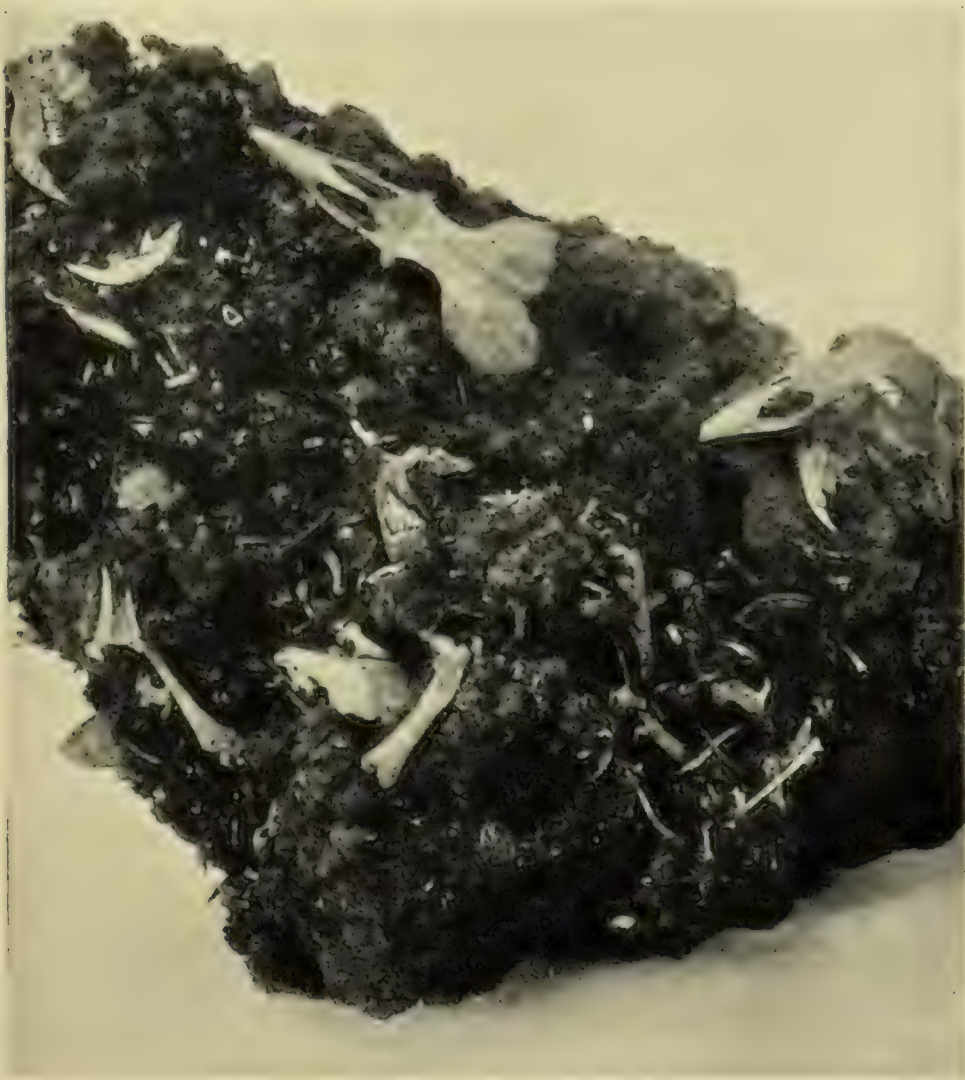
On climbing the tree to investigate, it was found that a second hole communicated with the "nest," but at the base of the branch and about 2 ft. from the junction of the branch and the parent tree, being about 8 ft. below the entrance hole.

Instead of the usual "pellets" or castings scattered about, there was a conglomerate mass of bones firmly fixed in a brownish earth-like material, a large mass of which, about as big as a football, was lifted out (see accompanying photograph), and appeared to consist chiefly of skulls of shrews, voles, field-mice, and the various limb girdles, ribs, etc., of the same.

There were also occasional skulls of birds, and the remains of the shell of an Owl's egg were also noted.

This "conglomerate" appeared to extend some distance down the branch, and must have taken many years to accumulate.

The same tree also yielded a nest of a Jackdaw (*Colæus m. spermologus*), a Little Owl (*Athene n. mira*) in a hole in a lower



MATERIAL TAKEN FROM BARN-OWL'S NEST-HOLE.

limb, and in a previous season a Tree-Sparrow (*Passer m. montanus*) had made its nest in a hole in a long, over-hanging branch of this same old walnut tree.

CLEMENCE M. ACLAND.

[Such accumulations of debris of pellets are normally found wherever there is space near the nest of this species and sometimes are of great extent.—F.C.R.J.]

CLUTCHES OF FIVE EGGS OF PEREGRINE FALCON.

IN Vol. VIII., pp. 26 and 52 of *British Birds*, records of Peregrine Falcons (*Falco peregrinus*) occasionally laying five eggs to the clutch, in Pembrokeshire, are given directly or indirectly by me.

I have now received indisputable evidence of two more sets of five eggs of this species from Pembrokeshire. They were seen *in situ* by Mr. Nigel Haig in 1912 or 1913 and 1922 respectively.

It is obvious that in that county sets of five eggs are by no means very unusual, and it would be interesting to know if there is any evidence as to these large sets having been noted elsewhere than in Pembrokeshire. W. M. CONGREVE.

[Since the notes in *Brit. Birds*, VIII., *loc. cit.*, were written I have received definite information of clutches of five eggs of Peregrines from at least three localities in Great Britain, outside the Pembrokeshire area (Isle of Wight, Dorset and Scotland).—F. C. R. JOURDAIN.]

ABNORMAL CLUTCH OF KESTREL'S EGGS.

ON June 27th, 1923, I visited a wood in north-west Berkshire where a pair of hawks had been noticed recently, and noticed a bird leave the top of a large spruce, but could not get a clear view of it. On climbing the tree I found an old magpie's nest about 40 ft. from the ground and in it were four white, but somewhat dirty, eggs, still warm. At the first glance I took the eggs for those of the Long-eared Owl (*A. otus*), but there were several unmistakable feathers of the Kestrel (*Falco f. tinnunculus*) about the nest. In order to make certain of the identity of the eggs I concealed myself about twenty yards away, and presently caught several glimpses of a hawk flying uneasily round. After about ten minutes she came right over and gave me a good view of her wide-spread barred tail and soon after settled on the tree for a moment. One or two feathers were missing and the bird gave one the impression of having been shot at. After waiting till she returned again, and having satisfied myself as to the ownership of the eggs, I took them. They proved to be some weeks incubated and were all infertile. The yolk was of the pale lemon colour characteristic of the falcons, and a considerable amount of the liquid contents had been lost by evaporation.

With the exception of one or two brown stains, which may be due to blood stains, there are no markings whatever on the eggs, which are rather thin-shelled and rough surfaced.

I have several times met with instances in which one egg of a clutch of the various species of falcon is white or nearly so, but am not aware that a full clutch of white eggs of any species has ever been met with previously.

White eggs are not uncommon in the case of most of the Passeres, which are capable of breeding at short intervals and lay coloured eggs normally, but the total failure of pigment must be much rarer in the case of slow breeding birds like the Falconidæ which normally lay eggs much suffused with colouring matter.

F. C. R. JOURDAIN.

NOTES ON BEWICK'S SWAN IN GLAMORGANSHIRE.

ON March 1st, 1923, when revisiting the pool near the coast in Glamorgan where the Bewick's Swans had been seen the previous autumn (see Vol. XVI., p. 220), I was surprised to see ten Swans, and on crawling nearer I identified them as seven adult and three immature Bewick's Swans (*Cygnus bewickii*). The three juveniles were considerably whiter than those previously seen on November 12th, 1922, but I assumed that they were probably the same family party on their return migration to the north, which had linked up with five others of the same species.



a.



b.



c.

Seven of them were asleep on the shore of the pool and remained so for over $1\frac{1}{2}$ hours, several of them resting on one leg. I noted on two subsequent visits that between the hours of twelve and three o'clock the majority of them rested on shore.

Three of the adult Swans were in the meantime engaged in washing, with much activity and a great deal of splashing, much of which was audible at a good distance. One of them repeatedly rolled over so far as to show the whole of the under surface of the body and both legs at the same time. All the washing and preening movements were performed with great rapidity and extended over a long period, and were most thorough,

Whilst feeding they mostly kept the head and neck submerged but occasionally "up-ended" as do some of the Ducks; on the second visit most of their feeding was done by "up-ending." Some observations on the length of time that they were submerged were made, and I found that when only the head and neck were under that they never exceeded 15-20 seconds, but when the whole body was "up-ended" they kept down from 20-30 seconds; these times were taken from different birds, and repeated many times.

On again getting closer to the Swans I was surprised to find great differences in the distribution of the yellow and black of the bill, so much so as to cause me at one time to wonder if there were any Whooper Swans amongst them, but as none of the birds showed any difference in size this could not have been the case. In some the portion of the black band running up the centre of the bill was quite broad (*a*), in others narrow, and in one case it was absent altogether (*b*), and in two of them it was broken (*c*), as in the accompanying diagram.

I saw the Swans up till March 11th, and was then unable to visit the pool again until March 25th, when they had gone.

CLEMENCE M. ACLAND.

DIVE OF THE GREAT NORTHERN DIVER.

ON three occasions in May, 1923, I timed the dives of Great Northern Divers (*Colymbus immer*) in St. Mary's Harbour, the Isles of Scilly. Late in the evening of May 5th, with a calm sea, the dives were most regular, being nearly all as near as possible 40 seconds up and 20 seconds down, the maximum down being 52 seconds, all of these being when he was unsuccessful. When a capture was made the times were irregular of course, being from 29 to 31 seconds down. The catch appeared to be small cuttle-fish. He, and another just outside the harbour, were still fishing when darkness compelled me to give up watching them.

On the night of May 7th, with a choppy sea, one in the harbour was down as nearly as possible 40 seconds, but his stays on the surface were only from 10 to 15 seconds. Twice he was below 47 and 45 seconds respectively. He caught nothing and was still fishing at dark.

On the morning of May 21st, there was a good deal of ripple on the surface, and a lot of traffic in the harbour. His dives averaged 34 seconds and his periods on the surface only 9 seconds. I watched him for nearly an hour and he caught nothing at all during this period. The birds were in full summer plumage.

H. W. ROBINSON.

PROBABLE SECOND BROOD OF STONE-CURLEW.

THE *Practical Handbook* states that the Stone-Curlew (*Burhinus α . α dicnemus*) is single brooded. For some years I have had excellent opportunities of studying the habits of these birds, on the Downs, close to my home; and have been of the opinion that in some cases, at any rate, this species is genuinely double brooded. One cannot generalize from a solitary instance, but it is in the hope that other field-workers may be tempted to find further evidence, that this note is forwarded; and in support of my opinion, the following facts speak for themselves:—

On May 2nd, 1922, I located a pair of Stone-Curlews, and found their eggs. These eggs were very unusually marked; one being heavily blotched at the big end, the other being equally blotched at the small end. I nicknamed this pair of birds the Sparrow-Hawk pair, as their eggs reminded me of the not uncommon markings in a clutch of Sparrow-Hawk's eggs.

On May 5th, 1923, accompanied by three other ornithologists, we discovered a similar pair of eggs to last year's, in the same locality. The eggs were chipping, and the chicks calling from inside. We watched the action of the egg-tooth enlarging an aperture in the shell, a couple of hours afterwards.

On June 24th, 1923, Mr. J. S. Dyson and I went out with the deliberate intention of putting my theory to the test with these abnormally marked eggs; thereby precluding the possibility (however unlikely) of another pair of birds invading the territory of my "Sparrow-Hawk" pair.

Not fifty yards from the May 5th scrape, we found one dead chick, and one chipping "Sparrow-Hawk" egg, with the chick crying inside.

The locality, the dates, and the abnormal type of egg all being proofs that the same pair of Stone-Curlew had brought off two broods this year.

CECIL SMEED.

[The question as to whether a bird is single or double brooded is often a very difficult one to decide, as it is far from easy to distinguish second or third layings from genuine second broods. In the case of the Stone-Curlew it is only possible to get satisfactory evidence in the case of isolated pairs or where there is some peculiarity in the egg, as in the instance before us.

While freely admitting that on the face of the evidence it seems probable that a second brood was reared, there is one point on which the proof lacks completeness.

The first pair of eggs was chipping on May 5th and the second on June 24th. Taking the incubation-period at 26-27 days, the eggs must have been laid about May 29-30th, leaving only 24-25 days for the rearing of the first brood and for the birds to come into condition again, select the nesting scrape, etc. This seems rather a short period and suggests the possibility of some accident having occurred to the chicks of the first brood. We should welcome further evidence on the point.—EDS.]

LITTLE GULLS AND LITTLE STINT IN NORFOLK IN JUNE.

ON June 17th, 1923, when on the island on Hickling Broad, Miss E. L. Turner and I watched a Little Gull (*Larus minutus*) in full summer dress. The bird spent most of the day on the Broad. When we first noticed it, it was flying with some Black-headed Gulls at the Hickling end of the Broad, between three-quarters of a mile and a mile from the island; yet it was perfectly easy to pick it out by its smaller size, shorter wings, and characteristically desultory flight. It was stooping repeatedly towards the water, flycatching-like a Black Tern. At this distance and against the background of trees it looked bluer than the Black-headed Gulls. Later it left its companions and passed close to us, when we could see its black head and neck, its white tail and wings, and other characters very distinctly.

On the 26th we were at Cley, and on the flooded marshes saw an immature bird of the same species. It was swimming by itself, turning round and round, and snatching at the insects on or near the surface. There were numbers of Black-headed Gulls about, and these emphasized its small size. Its crown and nape and upper-neck were sooty, but it had a wide pale frontal; its primaries were dark and its tail banded.

A Little Stint (*Calidris minuta*) in summer dress was feeding on a mud bank on the same marshes on this date.

T. A. COWARD.

GREAT BLACK-BACKED GULL BREEDING IN SOMERSET.

THE record by Messrs. Ingram and Salmon (*antea*, p. 41) of the breeding of the Great Black-backed Gull (*Larus marinus*) on Steep Holm is of great interest, and so far as I am aware, is the first *definite* published record of the breeding of this species in Somerset. Colonel Montagu in his *Ornithological Dictionary*, 1802, states that while searching for this species

on the Welsh coast he was "informed by the fisherman (who call them Cobbs) they breed on the Steep Holmes and on Lundy Islands in the Bristol Channel." F. O. Morris (1857) and Cecil Smith (1869) both refer to the nesting of the species on Steep Holm, but as no definite records are given, it is probable that they both copied from Montagu.

The earlier history of the 1923 pair may be of interest. On March 11th, 1923, Colonel A. E. Lascelles of Holway, Taunton, saw a pair on the island, and on May 7th, in company with two friends, found the nest in which could be seen two or possibly three eggs, and the birds were clearly identified. The nest was not disturbed nor too closely approached, as a Raven was about looking for unguarded eggs. Colonel Lascelles at once reported the facts to me as President and Chief Recorder of the Ornithological Section of the Somersetshire Archæological and Natural History Society, and we decided, in the interest of the birds, not to publish the record for the present.

In May, 1922, Colonel Lascelles stayed five days on the island and saw no birds of this species there, and during the last few years of the last, and the first few of this century, I frequently visited the island, but never met with this species breeding there.

This is very likely the first nest built there for very many years, and it is good to read that the eggs were safely hatched.

F. L. BLATHWAYT.

ALTHOUGH the Great Black-backed Gull has not been previously recorded breeding on Steep Holm, at all events in recent years, it has been very strongly suspected of doing so, especially in 1922, but no proof was forthcoming, partly owing to the lessee's strict watch to prevent visitors from landing without license. This year a nest with three eggs was found on May 14th, and another nest with one perfectly fresh egg on June 3rd, the day following Messrs. Ingram and Salmon's visit (*antea*, p. 41), so that two pairs at least bred there this year. Now that this species is attempting to re-establish itself at what is unquestionably an old resort, I feel confident that Somerset oologists will give it a sporting chance; trippers do the real damage; they take every egg out of sheer ignorance and wantonness.

STANLEY LEWIS.

GREAT BLACK-BACKED GULL KILLING RAZORBILL.

In a former issue (Vol. V., pp. 55 and 88) I pointed out the great destruction wrought by the Greater Black-backed Gull

(*Larus marinus*) to Manx Shearwaters and Puffins, when nesting in the near vicinity. The Razorbill (*Alca torda*), with its formidable beak, is evidently able to protect itself against this great Gull on land, for its dead body is never found among the other remains. On the sea, however, this bird does not seem to be safe, for in June, in the Scilly Isles, a party of fishermen observed a Great Black-backed Gull swoop down upon a single Razorbill from behind, and standing upon the bird as it floated on the water, tore it to pieces as quickly as any falcon could have done. The fishermen approached and driving off the Gull, picked up the remains of the Razorbill.

Previous to this the Gull had probably resorted to the same tactics as when doing a Puffin to death on the water, viz., by half drowning it first by making it dive again and again as fast as it came to the surface. In the case of the Puffin it often completes the drowning by holding it under water, and in many cases swallows it whole.

H. W. ROBINSON.

A DECORATED MOOR-HEN'S NEST.

ON June 18th, 1923, I saw a remarkable nest of a Moor-Hen (*Gallinula ch. chloropus*) which was singularly conspicuous owing to the way in which it was decorated. The nest was supported on the water-surface of an artificial pond near Hereford, by the end of an oak bough extending well over the water. The base of the nest was a substantial one of sticks, but it was copiously lined with long pieces of yarrow and coarse grass. However, what made it really conspicuous and somewhat remarkable was the fact that neatly placed on the edge of the nest and facing conspicuously outwards were three marguerite daisy flowers. Two of the flowers were so fresh that they looked as if they were growing from the nest, and made it a "landmark" from a considerable distance.

Both the yarrow and the daisies had been obviously collected from the bank of the pond where a gardener had recently been busy with a scythe. The nest apparently had no eggs, but the old birds and some of their first brood were always in its vicinity.

Nine days later there were seven or eight eggs (I could not see exactly how many) and the hen was sitting tamely and conspicuously. The flowers were dead, and the green stuff was somewhat faded. I imagine that the flowers were really only collected by chance, but they certainly looked remarkable in their freshness, and owing to the neat way they were placed on the edge of the nest facing conspicuously outwards.

W. M. CONGREVE.



STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 1 (new series), Aves, etc., 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS.

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND

F. H. L. WHISH,

TAXIDERMIST,

LYMPHAM, SOMERSET,

Specialises in the setting-up of Birds. No work leaves the premises lacking artistic handling and accuracy in detail; the charge for such work being exceedingly moderate.

A SELECTION OF H. F. & G. WITHERBY'S NEW BOOKS

The Deer and Deer Forests of Scotland

Historical, Descriptive and Sporting. By ALEXANDER I. MCCONNOCHIE, F.Z.S. Royal 8vo. Numerous photographs.
25/- net

Record Bags and Shooting Records (2nd Impression)

Compiled in many cases from hitherto inaccessible sources and private records, to which are added sections upon marksmanship, and the speed and weight of birds. By HUGH S. GLADSTONE, M.A., F.R.S.E., F.Z.S., M.B.O.U., Author of "The Birds of Dumfriesshire," "Birds and the War," etc. Demy 8vo., with photographs and reproductions from old engravings. 15/- net

The Highlands with Rope and Rucksack

Introducing a sports-ground practically unexplored by cragsman and tourist; with accounts of climbing and tramping by peak and pass. By ERNEST A. BAKER, D.Lit., M.A., Author of "Moors, Crags and Caves of the High Peak," "The Netherworld of Mendip," etc. Demy 8vo., numerous photographs. 12/6 net

A Naturalist in Hindustan

By MAJOR R. W. J. HINGSTON, M.C., M.B., I.M.S., Author of "A Naturalist in Himalaya." Demy 8vo. With photographs and sketches. 16/- net

The Badger, Afield and Underground

A Monograph for the Sportsman and Naturalist, containing every known detail in this animal's life, by day and night, with observations bearing on fox-hunting. By H. MORTIMER BATTEN, F.Z.S., Author of "Habits and Characters of British Wild Animals," etc. Demy 8vo. Photographs and sketches. 8/6 net

Windjammer Yarns

Incidents in the life of a South African seaman in the Wooden Ships and Steam Tramps of Fifty Years ago. By CAPTAIN ALEX ANDERSON. Demy 8vo., with contemporary photographs. 12/6 net

From Golden Gate to Golden Sun

A Record of Travel, Sport and Observation in Siam and Malaya. By HERMANN NORDEN. Fellow of the Royal Geographical and American Geographical Societies. Demy 8vo., numerous photographs. 15/- net

A Monograph of the Pheasants

A sumptuous work, compiled from the Author's own observations and from all published sources. By WILLIAM BEEBE. Four Vols., Royal 4to. Numerous coloured plates, photogravures and maps. £12 10s. net per vol.

red Room.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

SEPT. 1.
1923.

Vol. XVII.
No. 4.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

"The kind of Nature Magazine we have wanted for some time."—

Westminster Gazette.

"We wish Dr. Renshaw every success."—*The Ibis.*

Write to-day for Illustrated Prospectus from the Editor, c/o

SHERRATT & HUGHES, 34, Cross Street, Manchester
DO IT NOW.

NOW READY – Free on Application

A CATALOGUE OF A SELECTION OF BOOKS
on
**BRITISH AND FOREIGN BIRDS
AND THEIR EGGS.**

FRANCIS EDWARDS,

ANTIQUARIAN BOOKSELLER,

83, High Street, Marylebone, London, W.1.

The Oologists' Record.

A QUARTERLY MAGAZINE DEVOTED TO THE ADVANCE-
MENT OF OOLOGY IN ALL PARTS OF THE WORLD.

Vol. III. Now Current. 1st Volume 1920.

Vols. I. and II. can still be had.

Subscription 5s. per annum, post free to all parts of the World.

Is contributed to by the World's Leading Oologists and
Is the only Magazine devoted exclusively to Oology.

Published by Harrison & Sons, Ltd., 45, St. Martin's Lane, London, W.C.2

Editor: Kenneth L. Skinner, Brooklands Estate Office, Weybridge, Surrey

OUR BIRD FRIENDS

This delightful volume is written in a pleasant chatty manner, yet accurate in its dealings with such phases of bird life as are likely to attract attention and set the reader observing and enquiring for himself.

THE ADVENTURES OF COCK ROBIN AND HIS MATE.

The Robin's life story, and that of many of his natural history neighbours, is here clearly and cleverly illustrated by pen and picture. The camera and a good deal of hard work on the part of the author have produced a beautiful picture gallery of nature to illustrate the sound natural history knowledge given in this book.

By RICHARD KEARTON, F.Z.S.

**EACH
6/- Net.**

Both volumes are delightfully illustrated with over 100 half-tone reproductions of photographs taken direct from nature.

Cassells

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND

NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 4, VOL. XVII., SEPTEMBER 1, 1923.

	PAGE
A Note on the Nesting of the Whimbrel. By William E. Glegg	70
Recovery of Marked Birds	77
Notes :—	
The Colour of the Iris in the Juvenile Jay (B. B. Riviere, F.R.C.S.)	82
Golden Oriole in Dumfries-shire (M. Portal)	83
Brambling in Middlesex in July (Reg. B. Lodge)	83
Early Nesting of the Yellow Bunting (R. H. Brown)	83
Blue-headed Wagtail Nesting in Cornwall (G. H. Harvey)	84
Early Nesting of Grey Wagtail in the South of England (W. J. Ashford)	85
Great Grey Shrike in Anglesey (Prof. Kennedy Orton)	85
Song-Thrush's Nest Converted and Used by Blackbird (A. W. Boyd)	85
Dipper Nesting in Wiltshire (Norman H. Joy)	86
Roller in Devonshire (W. Walmesley White)	86
Montagu's Harrier in Cumberland (M. Portal)	86
Montagu's Harrier in Carnarvonshire (Prof. Kennedy Orton)	86
Garganey in Cheshire in Spring (A. W. Boyd)	86
Common Scoters Inland in Cheshire in Summer (A. W. Boyd)	87
Great Shearwater in Argyllshire (Seton Gordon)	87
Unusual Nest of Oystercatcher (W. J. Ashford)	87
Curious Nesting Site of Redshank in Kent (Rev. James R. Hale)	88
Wood-Sandpiper in Leicestershire (W. Hubert Barrow)	88
Red-necked Phalarope in Cheshire (A. W. Boyd)	88
Sandwich Tern Breeding in Dorset (Rev. F. L. Blathwayt)	89
Moorhen's Decorated Nest (Leonora Jeffrey Rintoul and Evelyn V. Baxter)	89
Short Notes :—	
Large Clutch of Rook's Eggs. Black Redstart in Sussex in Spring. Little Owl in Cornwall. Merlins Nesting in Trees in Yorkshire. Common Buzzards in Sussex. Departure of Grey Lag-Geese	89
Letters :—	
Recent Changes in the Birds of Scilly (H. M. Wallis and H. W. Robinson)	91
Dive of the Great Northern Diver—Correction (H. W. Robinson)	92

A NOTE ON THE NESTING OF THE WHIMBREL.

BY

WILLIAM E. GLEGG.

THE status of the Whimbrel (*Numenius ph. phaeopus*), on the island of the Shetland group where the accompanying photographs were obtained, must be defined as a rare breeding bird; the local bird man, who possesses a sound knowledge of the birds of his locality, used the words very rare. On the wide expanse of very wild moor to which this Shetlander conducted me there were probably not more than two pairs of this species. A friend living in the north of Scotland, who knew the birds of Shetland well, gave me two localities only for the Whimbrel, namely Noss and Hascosay; from personal observation I know that none nested on the former last year and I am informed that they do not appear to be nesting on either of these islands this year (1923). From my own observations and information derived from others the Whimbrel is now a rare nesting species in the Shetland Islands. Apparently Dr. Saxby considered the species to be common, for he states in his *Birds of Shetland*: "The Whimbrel breeds freely in Shetland, and is still nearly as abundant in Yell and Hascosea as at the time of Mr. Hewitson's visit many years ago." If this statement was correct there must have been a very serious decrease of the number of breeding birds. The tenant of the pastures of one locality informed me that whereas five years ago he found twenty nests of Curlew and Whimbrel now he only found one. The decrease of the Whimbrel is coincident with the remarkable increase of Great and Arctic Skuas.

The locality now under consideration is a good example of the Shetland moorland at its wildest, being composed of wide stretches covered with cotton grass, dwarf heather and moss, broken up with a labyrinth of deep and difficult moss-hags, many containing water. The long valley is enclosed by hills rising to 600 ft. on the east and 400 ft. on the west. The latter, on which I found the Whimbrel's nest, is much less steep than on the east, bears more cotton grass and is much more swampy.

My first attempt, with the native, to find the nest was unsuccessful, although on our return through mist we heard the "Titterel." Subsequent visits although without result narrowed the question to two probable nesting sites. On 11th June, 1923, I found a nest containing three eggs. The nest, which was practically without material, was placed



RETURNING TO THE NEST WITH RAPID STRIDES.

(Photographed by W. E. Glegg.)



NEST OF WHIMBREL.
(*Photographed by W. E. Glegg.*)



PREPARING TO SETTLE ON THE EGGS.

(*Photographed by W. E. Glegg.*)



WELL SETTLED DOWN.
(Photographed by W. E. Glegg.)

in the middle of what might be described as a knob of heather, the centre of this being hollowed out, whether by the birds or otherwise I do not know. The knob of heather was growing on a tiny knoll of peat, which was surrounded by very swampy ground. Inside the tent, which was a yard or two from the nest, the pressure of my feet made small pools of water, and just behind, had I not been wearing wading boots, I would have been well over the boot tops.

In its nesting haunts the Whimbrel is a very confiding bird and will allow the observer to approach almost within photographing distance, but there can be little doubt that this forms part of the bird's clever methods of hiding the locality of the nest. As a result of my observations I formed the opinion that the bird not sitting must keep a watch on the surrounding country from some elevated position. About a mile from and on my route to the nest another pair was stationed, probably nesting, and on one occasion one of this pair followed me over this distance, dropping to the ground close to me and calling repeatedly, and did not relinquish its attentions until well within the territory of the other pair. As this rendered the task of finding the nest photographed, more difficult, on my next visit to the moor I gave the territory of the nearer pair a wide berth, and when about half a mile from the territory of the nest I was suddenly greeted by the call of a Whimbrel, which dogged my footsteps persistently and noisily until I reached the locality of the nest. I concluded that the bird had flown to meet me and that this forms part of a clever method of confusing the nest seeker. I have heard it stated that the fact of a Whimbrel flying round with vibrating wings and calling indicates that nesting is in progress; this is no doubt so, but it does not necessarily indicate the proximity of the nest. The nest was eventually found somewhat fortuitously; while proceeding to put up my tent in another direction I disturbed a Whimbrel and later a second. Completing the erection of the tent I got inside and was able to keep both birds in view and within a few minutes of my disappearance one bird moved down the hillside and disappeared in a suspicious manner, while the other made a tour of inspection round the tent. Both birds seem to have been almost instantly deceived by my disappearance, and this suggests that this species must be almost devoid of memory. On my reappearance the bird rose from where it had disappeared and finding the nest was an easy matter. While putting up the tent the female, I suppose, was very bold, coming within a few feet of the nest. On the

following day the bird was on its nest within ten minutes of my entering the tent. No noise that I could produce, vocally or otherwise, moved her in the least and she was equally indifferent to the periodical inspection of the lens which was necessitated by the rain and mist driving over the moor. She was almost equally indifferent to a stick pushed under the canvas towards her. When returning to the nest the Whimbrel did so with rapid strides, suggestive of complete confidence and the photographer had to be on the alert to get the desired attitude. While settling down the very white rump was displayed and, when finally in a comfortable position, part of the long bill was hidden in the heather. I was in the tent on two days and on each occasion the sitting bird only once uttered any sound. On the first day she uttered a single whistle and on the second occasion a note resembling a Curlew call. Once, without apparent reason, she sprang suddenly into the air, straight from the nest. During several hours' watch I never got a glimpse of the other bird and very rarely heard it.

Close to the Whimbrel's nest was that of a Red Grouse with eight eggs; this species, introduced, is very scarce in this locality, and a little farther off was a Hooded Crow's nest in a moss-hag.

While in the tent I could hear the reeling of the Dunlin, the "yup-pa" of the Snipe, the plaintive call of the Golden Plover, the rippling cry of the Curlew, the harsh tone of the Hooded Crow and the querulous trisyllable of the Arctic Skua.

RECOVERY OF MARKED BIRDS.

THE following have kindly sent subscriptions towards the expenses of the scheme since the last acknowledgement was made : Mr. C. F. Archibald, Capt. A. W. Boyd, Messrs. G. Brown, W. G. Bramley, K. Fisher, R. M. Garnett, T. Kerr, Major W. F. McKenzie, Col. P. C. Macfarlane, Messrs. J. F. Madden, A. Mayall, Dr. H. J. Moon, Mrs. Patteson, Messrs. W. P. G. Taylor and A. H. R. Wilson.

CARRION-CROW (*Corvus corone corone*).—38,659, ringed at Gowbarrow Fell, Cumberland, as a young bird, by Dr. H. J. Moon, on May 12th, 1922. Reported at Temple Sowerby, near Penrith, Cumberland, early April, 1923, by Mr. D. McKeachan.

JACKDAW (*Colæus m. spermologus*).—63,951, ringed at Frandley, near Gt. Budworth, Cheshire, as a nestling, by Capt. A. W. Boyd, on May 19th, 1922. Reported at Middlewich, Cheshire, early June, 1923, by Mr. J. Taylor.

STARLING (*Sturnus v. vulgaris*).—LR.95. 98,102, ringed at Torrance, Stirlingshire, one adult and one young bird, by Mr. J. Bartholomew, on January 1st, 1920, and May 15th, 1921. Reported where ringed, on April 5th and 10th, 1923, by the ringer.

54,201, ringed at Patterdale, Ullswater, Westmorland, as a young bird, by Dr. H. J. Moon, in May, 1922. Reported where ringed, on April 21st, 1923, by Master Birkett.

52,222, ringed at Kinclune, Kingoldrum, Forfarshire, as a nestling, by Messrs. J. N. D. and T. L. Smith, on June 24th, 1922. Reported at Kirriemuir, Forfarshire, on April 18th, 1923, by Mr. J. S. Clark.

51,235, ringed at Kilmacolm, Renfrewshire, as a nestling, by Mr. and Mrs. R. O. Blyth, on May 18th, 1922. Reported at Houston, Renfrewshire, on March 21st, 1923, by Mr. H. Ogilvie.

56,435, 95,169, ringed at Eton, Bucks., as adults, by Mr. A. Mayall, on November 22nd, 1922, and December 14th, 1919. Reported where ringed, on March 11th, and in June, 1923, by Messrs. W. Brown and C. Carver.

52,901, ringed at Reading, Berks., as an adult, by Mr. A. S. Corbet, on November 27th, 1922. Reported where ringed, on February 22nd, 1923, by Mr. V. G. Jacob.

52,304, ringed at Maidstone, Kent, as an adult, by Mr. W. Wood, on February 12th, 1922. Reported near where ringed, on August 15th, 1923, by Mrs. F. Crampton.

56,068, ringed at Cheadle, Staffordshire, as a nestling, by Mr. J. R. B. Masefield, on May 19th, 1923. Reported at Kingsley, Stoke-on-Trent, about 10 miles from where ringed, on June 21st, 1923, by Mr. J. R. Carr.

CHAFFINCH (*Fringilla cælebs cælebs*).—PW.39, 1,355, ringed at Streatham, London, S.W., as adults, by Mr. F. J. Mitchell, on October 20th, 1921, and November 20th, 1922. Reported at Mitcham, and where ringed, May 1923, by Messrs. S. A. Holland and Darrell Hick.

3,078, ringed at Laugharne, Carmarthenshire, as a young bird, by Mr. J. F. Thomas, on July 29th, 1921. Reported within 200 yards of where ringed, on April 29th, 1923, by the ringer.

MZ.69, ringed at Torrance, Stirlingshire, as an adult, by Mr. J. Bartholomew, on June 18th, 1920. Reported where ringed, on May 25th, 1923, by the ringer.

1,944, ringed at Burnham, Bucks., as a young bird, by Mr. A. Mayall, on May 24th, 1921. Reported at Maidenhead, Berks., on April 10th, 1923, by Sir James Duke, Bart.

SKYLARK (*Alauda a. arvensis*).—NV.68, ringed at Frandley, near Gt. Budworth, Cheshire, as a nestling, by Capt. A. W. Boyd, on June 11th, 1921. Reported near where ringed, on April 10th, 1923, by the ringer.

MEADOW-PIBIT (*Anthus pratensis*).—4,802, ringed at Kilmacolm, Renfrewshire, as a nestling, by Mr. and Mrs. R. O. Blyth, on July 8th, 1921. Reported at St. Médard-en-Jalles, Gironde, France, on March 26th, 1923, by Mons. Maurice Destangue.

SONG-THRUSH (*Turdus ph. clarkei*).—G.243, ringed at St. Mary's, Scilly Islands, as a young bird, by Mr. H. W. Robinson, on April 27th, 1914. Reported where ringed, in June, 1923, by the ringer.

97,329, ringed at Lytham, Lancs., as a young bird, by Dr. H. J. Moon, on May 1st, 1921. Reported where ringed, on June 23rd, 1923, by Master H. Bagshaw.

97,776, ringed at Seaford, Sussex, as a young bird, by Mr. J. F. Thomas, on June 18th, 1922. Reported where ringed, on June 4th, 1923, by the ringer. Ring replaced by 100,702 and bird released.

97,229, ringed at Unthank, Gamblesby, Cumberland, as a nestling, by Mr. R. H. Brown, on April 20th, 1920. Reported where ringed, on March 24th, 1923, by Miss E. Dennison.

91,550, ringed at Torrance, Stirlingshire, as a nestling, by Mr. R. Dingwall (for Mr. J. Bartholomew), on June 14th, 1917. Reported at Cadder, near Glasgow, Stirlingshire, on March 4th, 1923, by Mr. Wm. Slaven.

BLACKBIRD (*Turdus m. merula*).—55,971, ringed at Pyrford, Surrey, as an adult, by Mrs. L. E. Taylor, on July 25th, 1922. Reported where ringed, on June 20th, 1923, by the ringer. Ring replaced by Z.1333 and bird released. 97,169, ringed at Winscombe, near Weston-super-Mare, Somerset, as a young bird, by Mr. W. H. Thorpe, on April 17th, 1920. Reported where ringed, in June, 1923, by Mr. Arthur King.

50,082, ringed at Streatham, London, S.W., as an adult, by Mr. F. J. Mitchell, on July 3rd, 1921. Reported where ringed, on June 15th, 1923, by Mr. A. Richards.

52,181, ringed at Broughty Ferry, Forfarshire, as a nestling, by Messrs. J. N. D. and T. L. Smith, on May 22nd, 1922. Reported where ringed, on June 14th, 1923, by Mr. A. G. Robertson.

53,124, ringed at Laugharne, Carmarthenshire, as a young bird, by Mr. J. F. Thomas, on September 1st, 1922. Reported two miles from where ringed, on April 18th, 1923, by Mr. Marcus David.

101,498, ringed at Pyrford, Surrey, as an adult, by Mr. W. P. G. Taylor, on December 26th, 1921. Reported where ringed, on December 24th, 1922, and again on June 19th, 1923, by the ringer. Ring replaced and bird again released.

68,259, ringed at Patterdale, Westmorland, as a young bird, by Dr. H. J. Moon, on April 30th, 1921. Reported where ringed, on February 3rd, 1923, by Mr. J. Patterson.

51,541, ringed at Torrance, Stirlingshire, as a young bird, by Mr. R. Dingwall (for Mr. J. Bartholomew), on May 4th, 1922. Reported where ringed, on March 9th, 1923, by the ringer.

92,416, ringed at Stocksfield, Northumberland, as a nestling, by Mrs. T. E. Hodgkin, on May 31st, 1922. Reported at Dunston-on-Tyne, co. Durham, on February 21st, 1923, by Mr. George Humphrey.

WHEATEAR (*Enanthe enanthe enanthe*).—A.2,914, ringed one mile north of Seaford, Sussex, as a nestling about nine days old, by Mr. J. F. Thomas, on May 18th, 1923. Reported near Whitstable, north Kent, on June 26th, 1923, by Mr. A. J. Page. The bird, which was sent, was in perfect juvenile plumage and was found dead on the railway.

- REDBREAST (*Erithacus r. melophilus*).—QW.68, ringed at Prestbury, Cheshire, as an adult, by Mr. R. M. Garnett, on October 25th, 1921. Reported where ringed, on February 15th, 1923, by Mr. H. Grayston.
3,086, ringed at Laugharne, Carmarthenshire, as an adult, by Mr. J. F. Thomas, on August 27th, 1921. Reported within a yard of where ringed, on April 21st, 1923, by the ringer.
A.1,588, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Bartholomew, on June 26th, 1922. Reported where ringed, in February, 1923, by the ringer.
5,699, ringed at Broughty Ferry, Forfarshire, as a nestling, by Messrs. J. N. D. and T. L. Smith, on May 18th, 1922. Reported at Gilston, near Largo, Fifeshire, on July 15th, 1923, by Mr. Paton, per Miss E. V. Baxter.
- HEDGE-SPARROW (*Prunella m. occidentalis*).—Z.566, ringed at Cheadle, Staffordshire, as an adult, by Mr. J. R. B. Masefield, on March 27th, 1915. Reported where ringed, on July 16th, 1923, by the ringer.
- SWALLOW (*Hirundo r. rustica*).—4,786, ringed at Kilmacolm, Renfrewshire, as a nestling, by Mr. and Mrs. R. O. Blyth, on July 4th, 1921. Reported nesting on Heathfield Farm, Lochwinnoch, about seven miles from where ringed, on July 4th, 1923, by Mr. Charles M'Culloch.
FW.39, ringed at St. Nicholas, Cardiff, as a nestling, by Miss C. M. Acland, on July 31st, 1921. Reported in upper eastern corner of Luozi district, in Belgian Congo, in December, 1922, by Mr. G. Palman (*antea*, p. 60).
A.7,805, ringed at Dorney, Bucks., as a nestling, by Mr. A. Mayall, on June 15th, 1923. Reported at Winchfield, Hants., on July 18th, 1923, by Miss Englefield.
MT.2, ringed at Aldcliffe, Lancaster, as a nestling, by Mr. H. W. Robinson, on August 24th, 1922. Reported at Barnacre, near Garstang, Lancs., on August 14th, 1923, by Mr. J. Newnham.
- SPARROW-HAWK (*Accipiter n. nisus*).—70,799, 71,501, ringed at Kinclune, Kingoldrum, Forfarshire, as nestlings, by Messrs. J. N. D. and T. L. Smith, on July 8th, 1922. Reported at Cortachy, Forfarshire, and Murthly, Perthshire, on April 3rd, and in July, 1923, by Messrs. David Rea and W. H. Cox.
- CORMORANT (*Phalacrocorax c. carbo*).—101,818, ringed at Castle Loch, Mochrum, Wigtownshire, as a nestling, by

Mr. J. G. Gordon, on June 14th, 1919. Reported at Ross, Kirkcudbrightshire, on June 22nd, 1923, by Mr. David Marshall.

WOOD-PIGEON (*Columba p. palumbus*).—71,476, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Bartholomew, on June 15th, 1922. Reported at Bearsden, about 7 miles N.W. of Glasgow, Stirlingshire, early April, 1923, by Mr. James Begg.

LAPWING (*Vanellus vanellus*).—52,218, ringed at Kinnordy Lochs, Kirriemuir, Forfarshire, as a young bird, by Messrs. J. N. D. and T. L. Smith, on June 10th, 1922. Reported at Templemore, co. Tipperary, on February 10th, 1923, by Mr. J. Delahunty.

BLACK-HEADED GULL (*Larus r. ridibundus*).—30,672, ringed at Ravenglass, Cumberland, as a young bird, by Messrs. H. W. Robinson and F. W. Smalley, on June 13th, 1910. Reported where ringed, on April 14th, 1923, by Mr. K. Fisher.

LESSER BLACK-BACKED GULL (*Larus f. affinis*).—37,575. 21,035, ringed at Foulshaw, Westmorland, as young birds, by Mr. H. W. Robinson, on July 30th, 1920, and July 24th, 1922. Reported on Scargill Moor, N. Yorkshire, and at Bay of Santander, North Spain, end of May, and March 19th, 1923, by Messrs. Charles Atkinson and T. O. Gooding.



NOTES



THE COLOUR OF THE IRIS IN THE JUVENILE JAY.

BOTH in Howard Saunders's *Manual* (2nd edition, p. 236) and in the *Practical Handbook* (Part I, p. 29), the iris of the juvenile Jay (*Garrulus glandarius*) is described as brown. All the young Jays which I have seen and handled have, however, had irides of a very similar colour to that of the adult, i.e., bluish-white. This was so in the case of a young Jay, which I had last summer, which had been taken from the nest and hand-reared, and the colour of whose iris I particularly noted.

This year I have hand-reared another, taken from the nest when about 12-14 days' old, and only half feathered.

This bird's irides have undergone no change of colour since I have had it. They were, when it was taken from the nest, and are now (aged six weeks) of a bluish-white, with a very narrow ring of brown next to the pupil. This latter, however, is only distinguishable upon a close scrutiny of the eye, the general impression being of an iris of a bluish-white, only, perhaps, a shade duller than that of the adult.

Neither Howard Saunders nor the authors of the *Practical Handbook* state at what age the iris changes from brown to bluish-white, the former describing it as brown in "young" birds, and the latter in "juveniles."

If these authors are correct, and my young Jays with bluish-white irides are not unique, either the iris is only brown during the first week or so of life, or it is a variable character, being brown in some young birds and bluish-white in others. If the latter be the case then, according to my experience, those with bluish-white irides are vastly in the majority.

B. B. RIVIERE.

[In describing "soft parts" throughout the work, I have taken my information from notes made at the time the bird was shot, and written on the label, either by myself or other collectors. In the case of the Jay I regret that I cannot now trace the source from which the iris of the juvenile was described as brown. The only note on juvenile birds in my own collection is of one whose iris is described as "inner ring brown with an outer one of greyish-white." This very nearly corresponds with Dr. Riviere's observation,

and I think "brown" must be a mistake. The term "juvenile" throughout the *Practical Handbook* means, of course, a bird in juvenile plumage. The exact age cannot be ascertained except by keeping birds in captivity, or by ringing, but the approximate age can be estimated by comparing the normal breeding-season, the incubation period and the time of year in which the bird moults from juvenile to first winter plumage.—H. F. W.]

GOLDEN ORIOLE IN DUMFRIES-SHIRE.

EARLY in June, 1923, a female Golden Oriole (*Oriolus o. oriolus*) was picked up near Dumfries. It was in good plumage but nearly dead. I have seen the bird since it was stuffed.

M. PORTAL.

BRAMBLING IN MIDDLESEX IN JULY.

I RECEIVED in the flesh a male Brambling (*Fringilla montifringilla*) shot in an orchard at Enfield, Middlesex, on July 7th, 1923. Unfortunately the head was so damaged that it was impossible to make a skin of it. However, there were no signs of its having been in captivity. It appeared to be in autumnal plumage, the feathers on the head and back having reddish-brown tips. I kept the wings and top of the back, and enclose the latter.

REG. B. LODGE.

[The bird failed to migrate probably owing to some disability. The feathers sent are very little worn for the time of year, and possibly the moult was delayed.—H.F.W.]

EARLY NESTING OF THE YELLOW BUNTING.

WITH reference to Mr. D. W. Musselwhite's note (*antea*, p. 38) on the early breeding of the Yellow Bunting (*Emberiza c. citrinella*) in Suffolk, perhaps the following records of early nesting in Cumberland may be of interest :—

- | | | |
|-------|-------------|------------------------------------------------------------------|
| 1918. | April 16th. | Nest with 4 eggs. |
| | April 23rd. | " " 2 eggs. |
| 1920. | April 25th. | " " 1 egg. |
| | April 29th. | " " 4 eggs. |
| 1921. | April 15th. | Nest ready for laying. |
| 1922. | April 15th. | Flushed hen off 3 eggs. |
| | April 24th. | Nest ready for laying. |
| | April 29th. | Nest with 3 eggs. |
| 1923. | March 30th. | Observed cock Yellow Bunting with nesting materials in its beak. |
| | April 7th. | Two nests ready for laying. |

R. H. BROWN.

BLUE-HEADED WAGTAIL NESTING IN CORNWALL.

As Cornwall has not so far been included among the small number of counties in which the Blue-headed Wagtail (*Motacilla f. flava*) has been proved to breed, the following account of the breeding of a pair at the Marazion Marsh, near Penzance, may prove of interest.

On March 29th, 1923, and April 9th and 11th, there was a male Blue-headed Wagtail on the Marsh, on the 23rd and 24th there were two males, and on the 26th an undoubted pair. This pair I had under observation during the whole of May and the greater part of June without finding their nest, though to judge from their actions they were undoubtedly breeding. Many hours' watching gave me no clue to the position of the nest, till on June 28th I saw both birds carrying food. A few minutes' observation then led to the discovery of the nest containing six young birds, nearly fully fledged. It also made plain why I had previously been unable to locate it, for I had been looking in the marsh itself, while the nest was situated beside the railway, which here runs on a slight embankment through it. It was on the top of the embankment and seven feet from the metals. Built outwardly of bents, roots and a few scraps of moss, it was lined with hair and one or two small feathers, and must have been well concealed when built, as it was right on the ground. However, it had been rendered very open by the grass being cut. The young were fed about once every three or four minutes; thus between 9.20 a.m. and 12.7 p.m. on June 30th, they were fed thirty-five times by the male and eighteen times by the female. The fact that the female fed them so much less often than the male, was, I think, due to her being much more suspicious of my presence than the latter. I saw the fæces disposed of about once every fourth time the young were fed. Usually they were carried away and dropped at varying distances from the nest (a few feet up to a hundred yards), but twice I saw the male eat them. Both birds chased away other small birds that ventured too near the nest. Thus I saw the male chase away immature Pied Wagtails, and once an adult male Yellow Wagtail, while I saw the female chase away a Meadow-Pipit.

On June 30th there were still six young. I did not visit the nest on July 1st, but on July 2nd only two were left in the nest, and on July 3rd these, too, had flown.

After this I several times saw the birds carrying food into a thick reed-bed, but I did not actually see any young till July 14th when I saw two, still being fed by both parents. The last date I saw the birds was on July 26th. G. H. HARVEY.

EARLY NESTING OF GREY WAGTAIL IN THE SOUTH OF ENGLAND.

FROM the many notes which have appeared from time to time on the nesting of the Grey Wagtail (*Motacilla c. cinerea*) in the south of England—particularly the eastward extension of the breeding range during the last fifteen years—it is rather surprising that the early nesting of the species has been little remarked upon.

The note by the Duchess of Bedford (*antea*, p. 39) on an early nest in Devonshire prompts me to state that in parts of the south of England with which I am best acquainted, early nests are by no means unusual, and I have found eggs in the latter part of March in Somerset, Dorset and Hants. As another instance of the increase and extension of this Wagtail I may mention that in 1915 I knew of six pairs nesting on a four-mile stretch of river on the eastern side of Hampshire, practically every suitable site being occupied.

W. J. ASHFORD.

GREAT GREY SHRIKE IN ANGLESEY.

I WATCHED a Great Grey Shrike (*Lanius excubitor*) with field-glasses near the reservoir—Beaumaris—for several minutes on February 11th, 1922. This bird does not appear to have been recorded previously as seen in Anglesey.

KENNEDY ORTON.

SONG-THRUSH'S NEST CONVERTED AND USED BY BLACKBIRD.

ON May 7th, 1923, I ringed four well-fledged young Song-Thrushes (*Turdus philomelos clarkii*) in a nest in an elder at Great Budworth, Cheshire. On May 29th I was surprised to find a Blackbird (*Turdus m. merula*) sitting on two Blackbird's eggs in the same nest; unfortunately she deserted and on June 13th I removed the nest, finding one of the eggs well-incubated.

The Blackbird had added dry grass and dirty straw of rather darker colour to the rim of the nest and had lined the bottom of the cup with a little fine hay—the mud-lined interior being only partly covered by this and the sides left as the Thrush had made them.

Possibly the Blackbird's first nest had been destroyed, which would account for its quick adaptation of a ready-made nest.

On one occasion in Wytham Wood, near Oxford (May 17th, 1904), I found a Blackbird sitting on four incubated

Blackbird's eggs and two fresh Thrush's eggs, in a place which made it improbable that the nest had been meddled with; doubtless the Thrush's nest had been destroyed.

A. W. BOYD.

DIPPER NESTING IN WILTSHIRE.

WHILE stopping at Tisbury, Wiltshire, in June, 1923, I heard that Dippers (*Cinclus c. britannicus*) had nested there for the last four years. They had evidently failed to do so in one place this year, but Admiral Sandiman, of Chicks Grove, on the river Nodder, kindly lent me his waders to examine some nests under his house. I found one, which had recently been occupied, and two older ones, and I saw a Dipper there.

This is, I think, as far east, in the south of England, as the Dipper has been recorded as nesting regularly.

NORMAN H. JOY.

ROLLER IN DEVONSHIRE.

ON April 11th, 1923, I saw a Roller (*Coracias g. garrulus*) in Daleditch Lane, near Budleigh Salterton.

Though, owing to bad light, I was not in a position to see the plumage distinctly, the size, shape, and flight of the bird, and, more important still, the very characteristic harsh note, made identification quite certain. Moreover I have seen and heard Rollers in the Canary Islands on many occasions.

This record is of special interest because a Roller was shot in Daleditch Lane in September, 1841 (*vide* D'Urban and Mathew's *Birds of Devon*, p. 118). W. WALMESLEY WHITE.

MONTAGU'S HARRIER IN CUMBERLAND.

AN adult male Montagu's Harrier (*Circus pygargus*) was trapped at a nest of bad eggs, put out for Carrion-Crows, near Netherby, Cumberland, at the end of June, 1923. The female was still about at the beginning of August. M. PORTAL.

MONTAGU'S HARRIER IN CARNARVONSHIRE.

ON May 12th, 1922, I watched with field-glasses a female Montagu's Harrier quartering the ground on the moors between Carnarvon and Bangor.

KENNEDY ORTON.

GARGANEY IN CHESHIRE IN SPRING.

ON April 15th and 28th, 1923, I saw a pair of Garganey (*Anas querquedula*) on a marsh in south Cheshire, and on the second day was able to approach them very closely in an open meadow

to which they had flown. My attention was first drawn to them by the rattle-note of the drake as they flew. The keeper saw what must have been a pair of Garganeys there in the spring of 1921; his description was quite accurate.

In view of their occurrence in Cheshire last spring (*antea*, Vol. XVI., pp. 24/5) and in Staffordshire this year this further record seems to be of interest. A. W. BOYD.

COMMON SCOTERS INLAND IN CHESHIRE IN SUMMER.

COMMON Scoters (*Oidemia n. nigra*) have been recorded in summer in Cheshire on several occasions (cf. *British Birds*, Vol. XVI., p. 110). In 1923 a few have again appeared: on June 18th two restless adult drakes were on Marbury Mere, near Northwich, and on July 22nd there was another drake on Rostherne Mere. On August 11th there were six or eight round Hilbre Island, at the mouth of the Dee, where they may always be seen in the winter months. A. W. BOYD.

GREAT SHEARWATER IN ARGYLLSHIRE.

ON the morning of June 22nd, 1923, with a moderate W.N.W. breeze and misty rain, I saw a Great Shearwater (*Puffinus gravis*) within two miles of the entrance of Oban Bay in the Firth of Lorne. I have once or twice seen this bird west of Mull, but never before in such land-locked waters.

SETON GORDON.

UNUSUAL NEST OF OYSTERCATCHER.

WITH reference to Mr. Seton Gordon's note and photograph of an unusual nest of the Oystercatcher (*antea*, p. 41), I may note that this habit is occasionally indulged in in the south of England as well as in Scotland. For three consecutive years a certain pair of Oystercatchers in Dorsetshire had their nest on a bare peaty bank about forty feet above sea-level. Each year a very bulky nest of dead heather-stems was built similar to and quite as substantial as that photographed by Mr. Gordon, while another pair nesting only a short distance away on the beach below had their eggs in the bare shingle without the slightest attempt at a nest.

Another point of interest concerning this pair of birds is that each year four eggs were laid, and when visiting the spot on May 29th, 1918, after an interval of nine years, I again found four newly hatched young squatting just outside the nest, which was in the same place and composed of a large collection of sticks as before. W. J. ASHFORD.

CURIOUS NESTING SITE OF REDSHANK IN KENT.

ON June 4th, 1922, a keeper brought me eggs of the Common Redshank (*Tringa t. totanus*) to identify. These were highly incubated and would have hatched in a few hours. The nest was situated amongst some rough grass and self-sown oats in an uncultivated field on the top of the Downs in the parish of Boxley. By the Ordnance Survey map the field is over 500 ft. above sea level and the nearest marsh-land is about 5 miles distant. The bird was caught on the nest by a labourer but liberated. There being no cover in the marsh-land owing to the drought, these birds apparently had to go where they could conceal their nests. How the young would have been fed it is difficult to imagine!

JAMES R. HALE.

WOOD-SANDPIPER IN LEICESTERSHIRE.

ON May 10th, 1923, I had a good view of a Wood-Sandpiper (*Tringa glareola*) at close range through glasses; the bird was walking about and feeding on one of the weirs on Swithland Reservoir. The last time I met with this species in Leicestershire was in August, 1908, when I obtained a pair from the Ruin's pond in Bradgate Deer Park. W. HUBERT BARROW.

RED-NECKED PHALAROPE IN CHESHIRE.

ON August 5th, 1923, my wife called my attention to a small bird swimming about 200 yards from the bank in Marbury Mere, near Northwich, which proved to be a Red-necked Phalarope (*Phalaropus lobatus*).

It swam to and fro incessantly in a rapid, jerky way, continually darting at flies on the surface of the water. A number of Mute Swans rose from the water and put it up, but it flew for about 100 yards only and dropped lightly to the water again; when we left the mere it was still swimming up and down, some 80 or 100 yards from the edge.

While not in absolutely full breeding plumage the chestnut-red stripe running down the neck was still complete and most noticeable, the front of the neck and upper breast being dusky with a ruddy tinge. The forehead had traces of white on it and the crown, nape, back of neck and streak through the eye were dark. The feathers of the back and wings were very dark with some pale markings, and a white or light line appeared to run down the middle of the back; the underparts seemed to be quite white. The long black bill was evident at some distance.

I examined a series of skins a few days later and should think it was a male changing gradually from summer plumage.

On August 2nd—three days before—there had been very high winds in the neighbourhood and in the Irish Sea, which may account for the presence of a bird which is a very rare vagrant in Cheshire.

A. W. BOYD.

SANDWICH TERN BREEDING IN DORSET.

FOR several years past I have seen Sandwich Terns (*Sterna s. sandvicensis*) during the breeding season on the Dorset coast, and, though suspecting that they were breeding I could not prove it. I saw them again this year (1923), but had not the time to watch them closely. On or about July 16th a fresh egg was found near the spot where I had seen the birds. It was badly cracked when found and the finder gave it to me, and I have kept it as a proof of the record, the first, so far as I am aware, of the finding of the egg of this species in Dorset. It is a well-marked specimen, and quite unmistakable.

F. L. BLATHWAYT.

MOOR-HEN'S DECORATED NEST.

MAJOR CONGREVE'S note (*antea*, p. 68) referring to the above subject prompts us to record a similar observation made by us this spring (1923). In a small artificial pool, the bottom and sides of which are concreted, close to Charleton House, Colinsburgh (Fife), was the nest of a Moor-hen (*Gallinula ch. chloropus*). The nest was made of reeds and decorated with daffodil flowers; seven or eight of these were about the nest, some being worked into the outside, others laid in the cup. Daffodils were growing all round the pond and Colonel Anstruther told us that the Moor-hen had been decorating it for several days. In 1922 a pair built in the same place, and the nest was decorated with the flowers of the water plantain. The nest was, of necessity, rather conspicuous in a bare concrete pool, but it was made much more so by the fresh yellow daffodils with which it was ornamented.

LEONORA JEFFREY RINTOUL.
EVELYN V. BAXTER.

LARGE CLUTCH OF ROOK'S EGGS.—Mr. H. T. Gosnell reports (*Field*, 12.4.23, p. 548) that whilst taking eggs of Rooks (*Corvus f. frugilegus*) on March 27th, 1923, at Bampton, Oxon, he found one nest containing nine eggs. They all showed traces of incubation, and there was only one other nest in the

tree (oak), and that contained four eggs (also incubated slightly). The eggs are now in his collection.

BLACK REDSTART IN SUSSEX IN SPRING.—Prof. Kennedy Orton writes that a male *Phœnicurus ochrurus gibraltariensis* was seen on the shingle beach at the mouth of the Cuckmere on April 4th, 1922.

LITTLE OWL IN CORNWALL.—With reference to the spread westward of the Little Owl in Cornwall (*antea*, p. 42), Mr. G. H. Harvey writes that on July 6th, 1923, Mr. A. W. H. Harvey saw one near Penzance and about five miles from Land's End, and that he himself has several times this year seen them in the neighbourhood of the town. In an orchard surrounded by hollow elms at Gulval, near Penzance, he several times saw a pair in April and May, but was unable to discover a nest. On July 28th and 30th, however, he saw a party of five or six in the same place, probably the parent birds and a brood of this year as some were much smaller than others.

MERLINS NESTING IN TREES IN YORKSHIRE.—Mr. E. Arnold Wallis informs us that on May 21st, 1923, he met with a pair of Merlins (*Falco c. æsalon*) breeding in an old nest of the Carrion-Crow (*Corvus c. corone*) in a birch tree about 14 ft. from the ground on the Yorkshire moors, and also adds that a similar occurrence took place on the Whitby moors. The nest in the latter case was also a Crow's, about 25 ft. from the ground in a Scots pine, and the birds were trapped at the nest by the keeper and seen by Mr. Snowden of Whitby. Although only one instance of breeding in a tree is mentioned in the *Birds of Yorkshire* (I., p. 366), such cases have been reported on many occasions from Wales, and also from the Continent (Scandinavia and North Russia).

COMMON BUZZARDS IN SUSSEX.—Prof. Kennedy Orton reports that two Common Buzzards (*Buteo buteo*) frequented the South Downs in west Sussex for three days in the first week of September, 1922, and appeared to be travelling from west to east. At the eastern end of the South Downs one was seen twice in the third week of October.

DEPARTURE OF GREY LAG-GESE.—Mr. H. W. Robinson informs us that in 1923 the Grey Lag-Geese (*Anser anser*) left Leighton Moss, north Lancashire, on April 13th. Last year they did not depart until April 30th.



LETTERS



RECENT CHANGES IN THE BIRDS OF SCILLY.

To the Editors of BRITISH BIRDS.

SIRS,—With reference to my notes on "Recent Changes in the Birds of Scilly" (*antea*, pp. 55-8), Mr. George H. Fox writes me that Starlings were unknown at Falmouth in the *breeding* season between 1860-70, but were then more abundant in *winter* than now. They used to roost in immense flocks at Tregedna, Enys Woods and Swanpool reed-beds.

Between 1885 and 1890 they were breeding in Grove Hill and Mr. Fox's garden.

Mr. C. J. King writes me that I have missed the Sedge-Warbler, which to his knowledge is fairly common in one or more localities, and my "one Skylark" surprises him—he sees more.

He tells me Common Tern, which I hardly saw, merely a few pairs, and thought decreasing, turned up very late this summer, and bred in profusion on one island.

H. M. WALLIS.

READING, *August 16th*, 1923.

RECENT CHANGES IN THE BIRDS OF SCILLY.

To the Editors of BRITISH BIRDS.

SIRS,—In reading Mr. H. M. Wallis' interesting article in your last number, perhaps I may be allowed to make a few additions to his remarks, as I spent nearly two months in the islands this summer, and much longer in 1914.

Skylarks were fairly plentiful, but not breeding as freely as in 1914. Practically all the young are killed by cats and rats on the inhabited islands.

Sedge-Warblers (*Acrocephalus schænobæus*) arrived on St. Mary's on May 15th, and five or six pairs bred around one tarn.

Greenland Wheatears (*Enanthe æ. leucorhoa*) were passing through but not in such numbers as in 1914, some remaining a long time.

Great Tit.—At least three pairs reared broods on St. Mary's.

Sand-Martins (*Riparia r. riparia*).—I saw a few on passage on several occasions.

Goldcrest, Chaffinch and Greenfinch.—Dr. P. heard all three singing in Tresco gardens one day in May. Personally I have yet to see or hear them.

Corn-Bunting.—Not uncommon and breeding on St. Mary's. In 1914 I saw none.

On May 20th a single Hooded Crow (*Corvus c. cornix*) was seen. During the winter of 1921 a flock appeared on St. Mary's which remained some time. They were nearly all shot.

Land-Rail (*Crex crex*).—In 1914 the only trace of the bird was one leg in the Peregrine's eyrie, and another in the nest of a Great Black-backed Gull. In 1922 a pair nested on St. Agnes and another pair probably in a small garden on St. Mary's. This year they were fairly numerous on St. Mary's in May, and one pair were in the same field for over a month and possibly bred there. In April one ran into a house in the town on St. Mary's and became quite tame, feeding out

of its captor's hand. He kept it for a month and liberated it when the worms in his small garden gave out.

Turnstones were seen every day in May in St. Mary's Harbour.

I have not added any new records, but merely added to those species mentioned by your correspondent. H. W. ROBINSON.

DIVE OF THE GREAT NORTHERN DIVER—CORRECTION.

To the Editors of BRITISH BIRDS.

SIRS,—In my note on this subject (*antea*, p. 64), the times given for the first observation should be reversed, so as to read: 40 seconds down and 20 seconds up.

H. W. ROBINSON.

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 1 (new series), Aves, etc., 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS, which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND

F. H. L. WHISH,

TAXIDERMIST,

LYMPHAM, SOMERSET,

Specialises in the setting-up of Birds. No work leaves the premises lacking artistic handling and accuracy in detail; the charge for such work being exceedingly moderate.



H. F. & G. WITHERBY'S NEW AUTUMN BOOKS

LINNÆUS

The Story of his Life, adapted from the Swedish of T. M. Fries, and brought down to the present day in the light of recent research, by Dr. B. DAYDON JACKSON, Hon. Ph.D. (Upsal), Genl. Secy. Linnean Society, Author of "Index Kewensis," "Glossary of Botanic Terms," Demy 8vo., with lithographic portraits and other plates and maps. **25/- net**

This exhaustive account of the life work of the great Naturalist and father of modern biology is a notable advance upon anything that has so far appeared; its much greater extent and more completed detail, the care that has been taken by the omission or correction of faulty and fantastic statements, and also the inclusion of much additional data, render the work of permanent value.

THE BLACK REPUBLIC

Liberia, Its Political and Social Conditions To-day. By HENRY FENWICK REEVE, C.M.G. (late Colonial Secretary, Nigeria and Gambia), with an Introduction by SIR ALFRED SHARPE, K.C.M.G., C.B., Demy 8vo, photographs. **10/6 net**

THE IMPOSSIBLE ISLAND

Corsica, Its People and Its Sports. By "SNAFFLE," Author of "The Image of War," "The Roedeer," etc. Demy 8vo., with sketches by Miss D. Forster-Knight. **10/6 net**

THIRD IMPRESSION.

Record Bags and Shooting Records

Compiled in many cases from hitherto inaccessible sources and private records, to which are added sections upon marksmanship, and the speed and weight of birds. By HUGH S. GLADSTONE, M.A., F.R.S.E., F.Z.S., M.B.O.U., Author of "The Birds of Dumfriesshire," "Birds and the War," etc. Demy 8vo, with photographs and reproductions from old engravings. **15/- net**

326, HIGH HOLBORN, LONDON, W.C.1

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

OCT. 1.
1923.

Vol. XVII.
No. 5.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

WANTED.

British Museum Catalogue of Birds, Vols. 1 to 6

” ” ” ” Fishes, Complete Set

” ” ” ” Snakes, Complete Set

Address offers to—“B,” office of “British Birds.”

LE GERFAUT

REVUE BELGE D'ORNITHOLOGIE,

Fondée en 1911.

Le seule publication scientifique belge traitant des oiseaux, spécialement des oiseaux de la Belgique.

Abonnement 10 francs par an.

Direction : Square Prince Charles 21, Bruxelles-Laeken (Belgique).

The Oologists' Record.

A QUARTERLY MAGAZINE DEVOTED TO THE ADVANCEMENT OF OOLOGY IN ALL PARTS OF THE WORLD.

Vol. III. Now Current. 1st Volume 1920.

Vols. I. and II. can still be had.

Subscription 5s. per annum, post free to all parts of the World.

Is contributed to by the World's Leading Oologists and

Is the only Magazine devoted exclusively to Oology.

Published by Harrison & Sons, Ltd., 45, St. Martin's Lane, London, W.C.2

Editor: Kenneth L. Skinner, Brooklands Estate Office, Weybridge, Surrey

FOR SALE.

ARCTIC BIRDS' SKINS,

MAMMALS,

SKULLS AND EGGS.

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22.

Full particulars on application.

G. DINESEN, Danebrogsgade 8, Copenhagen, B. DENMARK

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 5, VOL. XVII., OCTOBER 1, 1923.

	PAGE
Field-Notes from Glamorganshire. By Geoffrey C. S. Ingram and H. Morrey Salmon	94
Some Observations on Cuckoos in 1923. By Edgar Chance, M.B.O.U.	98
First Impressions of Some Birds Seen on the Naardermeer. By Edward A. Armstrong, B.A.	102
The Name of the Scottish Ptarmigan. By Dr. Ernst Hartert	106
On the Red Grouse from Ireland and the Outer Hebrides. By H. F. Witherby	107
On the Names proposed by Rennie in Montagu's Ornithological Dictionary. By the Rev. F. C. R. Jourdain, M.A., M.B.O.U., H.F.A.O.U.	108
Notes :—	
A Jackdaw's Way of Collecting Nesting Material (Major Cecil Smeed)	109
Small Broods of Cirl Bunting (Joseph H. Symes)	109
Nest of Swallow Without Mud (J. F. Thomas)	109
Fledgling Period of Swift (Rev. William Serle)	110
Tawny Owl Feeding Young in August (R. H. Brown)	112
Little Grebe and Coot Laying in Same Nest (Major Cecil Smeed)	112
Early Laying and Incubation Period of Stone-Curlew (W. J. Ashford)	113
On the Feeding Habits of the Ruff (Edward A. Armstrong)	113
Short Notes :—	
Recovery of Marked Birds.— <i>Correction.</i> Passing of the Tern Colony at Malahide, co. Dublin	114
Letters :—	
The Colour of the Iris in the Jay (Marjory Garnett)	115
Folklore of the Lady Hen or Skylark in Shetland (W. E. Glegg)	115
Dipper Nesting in Wiltshire (D. W. Musselwhite)	115
Nesting of the Whimbrel and Curlew in Shetland (E. G. B. Meade-Waldo)	116
Should the "Larger Gulls" be Protected? (Herbert Massey)	116

FIELD-NOTES FROM GLAMORGANSHIRE.

BY

GEOFFREY C. S. INGRAM AND H. MORREY SALMON.

LESSER REDPOLL (*Carduelis linaria cabaret*).—A couple of interesting incidents relating to the breeding of this species have come under our personal observation.

The first of these occurred in 1921, when a pair were found building a nest in a poplar on May 26th. On June 2nd they were busy removing it to another site, which, unfortunately, we were unable to locate. The next day, June 3rd, the whole of the materials of the nest, except the foundation, had been removed.

The second incident was noted on May 30th, 1922. A female was brooding on a nest containing three young. When disturbed from them she withdrew a short distance, uttering her long-drawn alarm note. In a few seconds there were five or six other Redpolls fluttering around, one of them a male in brilliant plumage, possibly her mate.

The female resented the near approach of these to her nest, and drove them off, and then returned and covered the young again.

While she was so engaged a bird alighted on the nest edge, and proceeded to feed her amid much fluttering of wings on her part. During this incident the brightly-coloured male was sitting in the tree a yard or so from the nest, and a careful examination of the bird that was doing the feeding, through binoculars, at short range, revealed it as another female.

In the locality where this nest was situated, small parties of Redpolls are to be seen daily during the spring and summer, but careful searching has never resulted in more than one nest being found in a season. It would, therefore, appear that the majority of these birds are non-breeders.

LITTLE OWL. (*Athene noctua mira*).—We notice that this species is not recorded in the *Practical Handbook* as breeding in Glamorganshire. In the *Birds of Glamorganshire* (1899) it is spoken of as "rare" and three specimens only are recorded.

During recent years, especially the last four or five, it has increased greatly, and is now thoroughly established in the county.

Breeding was first noticed in 1919 by Col. J. I. D. Nicholl, who saw young birds sitting at the entrance of a rabbit-burrow. (*Trans. Cardiff N. S.*, Vol. LII.)

In 1921 we found a nest with fledged young in a hole in an old ash tree, and this site was used again in both 1922 and 1923.

MERLIN (*Falco columbarius æsalon*).—In several instances our observations do not agree with those of Mr. W. Rowan



FEMALE MERLIN BROODING YOUNG TEN DAYS OLD, IN SUNNY WEATHER. JULY 2ND, 1922.

THE YOUNG CAN BE SEEN UNDER HER BREAST.

(Photographed by G. C. S. Ingram.)

as set out in his series of articles upon this species, in Vol. XV., *British Birds*.

On page 224 he states that "the mother never broods her young." This state of affairs may very well have prevailed, and most probably arose from the presence of the "hide" at the nest he was observing, but we venture to think it is not usual, and our experience proves that in

this district at any rate, up to the age of ten days, the young are constantly brooded. For the last ten years we have had opportunities of making observations at one, and in some cases two nests annually, and have invariably found the female brooding young under a week old, and last year (1922) secured photographic records of the brooding of



FEMALE MERLIN BROODING DURING A HEAVY RAIN STORM.
JULY 2ND, 1922.

(Photographed by G. C. S. Ingram.)

young ten days' old. At this nest, when the weather was fine and sunny, which was very infrequently, the female stood half over them, sheltering them with her breast, but when storms broke and a high wind drove the rain fiercely on to the nest, she faced the wind with lowered head, beak touching the ground, drooping wings, and elevated tail, the young seeming to be between her legs and under her tail. If a storm broke while she was engaged in feeding

them she would immediately leave the food and resume her brooding.

As regards the method adopted by the male to hand over food to his mate, we have seen this done many times, and it has always been the same. In the vicinity of the nest there are always a couple of favourite "stands," and to these the male brings his kill. Sometimes he will pluck it and then call his mate, and sometimes he will simply call and then fly off, leaving it unplucked, in which case the female will pluck it before carrying to the young. We have *never* seen food delivered in the air.

Exceptionally the male has been flushed from a nest containing young, and from the remains of food lying around it has been easy to see that he had been feeding them.

From the "stands" mentioned and from the nest we have gathered remains of the following species:—Meadow-Pipit, Blackbird, Linnet, Greenfinch, Wheatear, Skylark, Sand-Martin, Ringed Plover, Song-Thrush, Redshank, Lesser Tern, Starling and young rabbit.

GREEN SANDPIPER (*Tringa ochropus*).—At Llanishen Reservoirs four were seen on July 30th, and one on August 20th, 1922.

BLACK-NECKED GREBE (*Podiceps nigricollis*).—One juvenile was seen at Llanishen Reservoirs on September 24th, 1922, and an adult at the same place on January 7th, 1923.

SOME OBSERVATIONS ON CUCKOOS IN 1923.

BY

EDGAR CHANCE, M.B.O.U.

THE following brief summary of my experiences and work in connection with the Cuckoo (*Cuculus c. canorus*) in 1923, may be of interest.

On Sunday, June 17th, between the hours of 5 and 9.30 a.m., the two Simmonds and I found four nests of Meadow-Pipits (*Anthus pratensis*) containing no less than six Cuckoos' eggs. One nest contained three Cuckoos' eggs and two eggs of the Meadow-Pipit; all fresh. Two of the Cuckoos' eggs are unquestionably the product of one and the same female. Each of the other three Meadow-Pipits' nests also contained one egg from the same Cuckoo. Thus five of the Cuckoos' eggs were laid by one Cuckoo and one by another. It is absolutely safe to assert that none of the nests had previously been discovered.

Altogether this year I found nine eggs from this Cuckoo but none after June 17th, whereas a fortnight later, on Sunday, July 1st, the same party at the same time of day, found more Pipits' nests on the same ground, three of which contained each a Cuckoo's egg by the same Cuckoo as that which laid the one egg out of the six found on June 17th. Thus it is practically certain that the two eggs by the same Cuckoo in the same nest were her last two of the season. This was the third season in which this particular Cuckoo had been laying on the ground in question.

This experience is strikingly parallel to that of a German named Fuchs whose work is reported upon by Arm. Mercier in an article published in *Chasse et Pêche* in Brussels on the 8th and 15th April, 1923. Referring to Fuchs's study of a Reed-Warbler Cuckoo, also for her third season, which, by the way, he never actually succeeded in seeing lay, the article concludes as follows :—

The bird to which *Cuculus canorus* confided her eggs was again a Reed-Warbler. However, an exceptional thing took place—the last two eggs laid were placed on the 27th and 29th June in the same nest! A truly extraordinary case since both these eggs emanated from the same female.

One is tempted to wonder whether on the rare occasions when a Cuckoo does lay twice in the same nest it is only when laying the last eggs of her series, and of course then only very occasionally.

A Cuckoo laying eggs of an exceptional type was found to victimize Spotted Flycatchers (*Muscicapa s. striata*) consistently ; altogether nine eggs were found, each in a Spotted Flycatcher's nest, and all within a radius of a few hundred yards, on the property of my friend, Mr. A. C. T. Woodward. One egg of this Cuckoo, also in a Flycatcher's nest, was found last year and a similar one in the year 1920. This year the Cuckoo was kept under such close observation that luckily the eggs were found almost immediately after they had been deposited. The first two eggs found were ejected by the foster birds and broken ; thereafter we removed the egg of the Cuckoo immediately on finding it.

Although the Cuckoo's egg was in appearance reasonably suited to the eggs of Spotted Flycatchers, the fact that they were so readily ejected by the foster birds supplies evidence as to why the Spotted Flycatcher Cuckoo, at least in this country, is at present a comparative rarity.

The now famous Cuckoo "A" of *The Cuckoo's Secret* film and book, returned to her common for her sixth season and was evidently on the point of beginning to lay when the extremely cold weather about the 6th May drove her from the common, along with her mate, alas, never to return ! Two or three weeks later her particularly devoted mate did return and for the rest of the season led a solitary existence on the borders of the common.

As a consequence, I went to considerable pains to find and introduce into nests on the common no less than sixteen Cuckoos' eggs and/or young Cuckoos, of which only nine survived the sundry perils to which bird life in its infancy is so subject. The nine which did leave their nests safely, each with a Witherby ring, were as follows :—

Ring No.	Fostered by	Date of leaving nest.	Origin of Cuckoo's egg.
Z.1001	Stonechat	Wednesday, June 20th	Taken as a fresh egg from a Hedge-Sparrow's nest about a mile distant, of which Cuckoo's egg I have a specimen in my collection.
Z.1002	Stonechat	Sunday, June 24th	Taken as an approximately fresh egg from a Meadow-Pipit's nest forty miles distant, of which Cuckoo's egg I have a specimen in my collection.
Z.1003	Stonechat	Friday, July 6th	Taken as a fresh egg from a Hedge-Sparrow's nest about a mile distant, of which Cuckoo's egg I have a specimen in my collection.

<i>Ring No.</i>	<i>Fostered by</i>	<i>Date of leaving nest.</i>	<i>Origin of Cuckoo's egg.</i>
Z.1004	Meadow-Pipit	Saturday, June 23rd	Taken as a young bird, about a week old, from a Hedge-Sparrow's nest about five miles distant.
Z.1005	Meadow-Pipit	Tuesday, July 3rd	Taken as a fresh egg from a Hedge-Sparrow's nest about one mile distant, of which Cuckoo's egg I have a specimen in my collection.
Z.1006	Meadow-Pipit	Monday, July 2nd	Taken as a fresh egg from a Meadow-Pipit's nest about three miles distant, of which Cuckoo's egg I have a specimen in my collection.
Z.1007	Meadow-Pipit	Saturday, June 30th	Taken as a young bird, about eight days old, from a Meadow-Pipit's nest about forty miles distant.
Z.1008	Sky-Lark	Thursday, June 28th	Taken as a young bird, about nine days old, from a Hedge-Sparrow's nest about a mile distant.
Z.1009	Red-backed Shrike	Wednesday, July 11th	Taken as a young bird, about nine days old, from a Hedge-Sparrow's nest about a mile distant.

The eggs from which Z.1003 and 1005 were hatched were laid by the same Cuckoo.

The eggs from which Z.1002 and 1007 were hatched were laid by the same Cuckoo.

The eggs from which Z.1008 and 1009 were hatched were almost certainly the product of the same Cuckoo as the egg from which Z.1001 was hatched.

As illustrating the variety of accidents which may befall the young birds, it is interesting to record that one two-day old young Cuckoo was trodden upon by the only cow on the common whilst the youngster was in the act of ejecting unhatched eggs from a Tree-Pipit's nest but five hours after the young Cuckoo had been placed in this nest. The same cow had been on the common for the last five years and in no other case had it destroyed any nest of which I was aware. The cow was sold the following day, but not for this offence !

Another young Cuckoo, hatched by a Meadow-Pipit, mysteriously disappeared from the nest whilst ejecting its nest-mates. This youngster was almost certainly taken by a male Shrike which is known to have done considerable damage amongst young nestlings on the common in the vicinity of this nest.

Two Cuckoos' eggs failed to hatch owing to their having been laid in deserted nests and presumably frosted through exposure for two or three days before incubation.

Another young Cuckoo, two days before being ready to fly, was killed by a puppy dog. Yet another Cuckoo's egg, along with those of the fosterer, was sucked by mice.

I am not without hope that one or more of the nine ringed youngsters which safely got away may return next season to the common. It will be interesting to ascertain whether any of such as are females adopt as their natural fosterers the same species as that which I forced to act as their foster-parents this year! In such cases as I possess a specimen egg it will be also possible, assuming again the capture of the young female, to ascertain what resemblance, if any, the egg of the daughter bears to that of her mother.

It is worthy of record that all reports, which I have received from many quarters in this country this year, without exception testify to the disappearance of a very large proportion of the female Cuckoos which in previous seasons had been laying in the same areas. In one district in Huntingdonshire only one out of five Reed-Warbler Cuckoos returned, one of the missing birds having laid regularly on her territory for seven consecutive seasons.

I consider that the disappearance means their death, which can safely be attributed to the extremely inclement weather experienced from May 6th onwards. My experience tends to show that female Cuckoos suffer in this respect more severely than the male birds.

FIRST IMPRESSIONS OF SOME BIRDS SEEN ON THE NAARDERMEER.

BY

EDWARD A. ARMSTRONG, B.A.

THE welfare of the birds in a country so near to us as Holland must always be a matter of interest to British naturalists. If a bird be exterminated in Holland there is so much the less chance of its ever appearing in our islands, and if a species becomes abundant in the woods, "polders" or "meers" of the neighbouring country, we have reason to hope to be visited by the bird and even to expect it to breed with us. We know that many of the birds of Holland, for example, the Black-tailed Godwit, Spoonbill, Avocet and Black Tern once bred in England, and when we hope that they may once more be included among our breeding species we are looking forward, not so much to an extension of the real range, as to the re-occupation of territory vacated for an interval. The return of the Bittern and the fact that Reeve's eggs are occasionally to be found with us must be attributed largely to the stronghold which these birds have in Holland.

I was delighted to have the opportunity of making the acquaintance of some of these birds when, on the 21st of June, I spent some hours on that lovely piece of water, the Naardermeer. Permission to visit the place must be obtained from the "Vereeniging tot Behoud van Natuurmonumenten in Nederland," and certain formalities must be observed, but the authorities are most obliging, prompt and sympathetic, and there is no unnecessary "red tape." Bird photography proper is not allowed, but I was permitted to use a small pocket camera. The Meer is reached by an hour's journey in the steam tram from Amsterdam and is thus easily accessible. Indeed the railway runs right through it, so that the traveller may easily catch a glimpse of its beauties. The industrious Dutch tried to reclaim the land but the porosity of the soil rendered the work fruitless; ornithologists have much cause to be thankful.

From the boatman's house the course lies down broad lodes or "sluits." The scene is enchanting; in front the water stretching away in a thin, gleaming ribbon, on either side whispering reeds tapering high above one's head, from which issue the strains of both Reed-Warblers. Lilies, white and yellow, lift their blossoms above the tranquil surface, the pale cups of the "Water Soldier" peep out here and there and

other lovely flowers shine among the reeds. Overhead dart Black Terns (*Chlidonias niger*), a Marsh-Harrier (*Circus aeruginosus*) wheels and soars high aloft and in the distance Purple Herons (*Ardea purpurea*) and Spoonbills (*Platalca leucorodia*) flap across the sky as they seek out remote feeding grounds. The very water is alive with fish.

The Great Reed-Warbler (*Acrocephalus arundinaceus*) is very common. Though only observed now and again as a brown bird flitting from one side of the sluic to the other it



EGG AND YOUNG OF MARSH-HARRIER IN THE NEST.

(Photographed by E. A. Armstrong.)

makes its presence apparent with its loud song, which, truth to tell, reminds me of a motor-hooter. Yet the song as one hears it is pleasing and the volume of sound greater than one would expect from the size of the bird. It is a common sight to see Bearded Tits (*Panurus biarmicus*) in pairs or family parties clinging to the tall reed stems and pecking at the feathery heads. The call, a metallic, though soft, ring, is very pleasing. The Purple Heron is quite numerous. Its nest is composed of long reeds and built on the reeds. The young

in a nest I photographed were quite big but differed somewhat in size. The cry of the Purple Heron seemed to me slightly less of a scream than that of its commoner relation.

Every now and then the monotonous rattling song of Savi's Warbler (*Locustella luscinioides*) rings out, showing that the bird is by no means uncommon on the marsh.

I was shown a nest of the Marsh-Harrier, a substantial structure some three feet or more in diameter and built of reeds. There was no food to be seen. The two young were about a fortnight old, according to the boatman, and still in down. One was smaller and less energetic than the other. There was one egg in the nest. The flight of the adults was graceful and easy. There was a breeze blowing and they soared and glided with great effect. The call is a mewing scream.

The Spoonbill is very carefully protected and one is not allowed to visit the nests. There appear to be about fifteen pairs breeding together in one colony. One bird, recognisable by its mutilated leg, has been observed here for twenty-five years. In flight the bird carries the neck outstretched, differing from the Heron in this; the legs stretched out behind often sag a little. These birds nested on Texel Island this year where they were troubled by the attentions of a Harrier. On the Island they go to feed on the Prinz Hendrik polder where, thanks to protection, they are not at all wild. I watched one feeding there within eighty yards of where I stood in full view. The bird feeds moving the head rather quickly from side to side, snapping with the bill while advancing in the water. Twice I saw an Avocet chasing one, the larger bird retreating ignominiously. Like Herons they come with considerable regularity to favourite feeding grounds, and on this polder they always came to feed in the evening. They are sociable both in nesting and feeding habits. It is to be hoped that these lovely birds may increase in Holland and that the time is not long distant when they may establish themselves in Norfolk.

On Texel the Black Terns breed on the polders, but on the Naardermeer all the nests I saw were situated on small floating patches of vegetation only a few square yards in size. There were seven nests on one patch within eighteen inches of one another. These patches of rushes may have been cut specially for the birds, but at any rate it would be well worth while creating similar floating islands in those places in England where Black Terns linger in the Spring. At the

Naardermeer there were no signs of young birds, whereas on Texel the eggs were chipping a week or ten days before.

The Avocet is not found on the "meer" and the Great Crested Grebe appears to be rather uncommon.

In conclusion I should like to put on record the great kindness with which I was received everywhere in Holland. The kindness of the Dutch is extended as much to the wandering bird-lover as to the breeding bird. We are happy in having such people as our neighbours.

THE NAME OF THE SCOTTISH PTARMIGAN.

BY

ERNST HARTERT.

THE British Ornithologists' Union List Committee, after careful examination of the text, has come to the conclusion that Macgillivray's name *Lagopus cinereus*, which I adopted for the Scottish form of the Ptarmigan, must after all be regarded as a substitute name for others used for the Ptarmigans of Europe, and cannot formally be construed to refer to the Scottish form as different from the other European ones. This view being taken, there is no name available for the Scottish Ptarmigan, and I therefore call it

Lagopus mutus millaisi nom. nov.

in honour of Mr. John Millais, the author of *The Wild Fowler in Scotland*, *Game Birds and Shooting Sketches*, *The Natural History of British Game Birds*, and other charming books, and whose series of Ptarmigan helped me to recognize the differences of the British subspecies as described in my *Die Vögel der palaarktischen Fauna*, p. 1868.

ON THE RED GROUSE FROM IRELAND AND THE OUTER HEBRIDES.

BY

H. F. WITHERBY.

THE Red Grouse from Ireland has been named by Pastor Kleinschmidt *Tetrao hibernicus* (*Falco*, XV., p. 3, 1919), and on the same page the same author has named the Red Grouse from Harris and Lewis, Outer Hebrides, *Tetrao dresseri*.

In examining the very large series of Red Grouse in the British Museum collection I was at once struck by the distinctive appearance of Grouse from Ireland, and on making a careful comparison of thirty Irish Grouse with a very large series of British Grouse it was clear that two forms must be recognized. The specimens of the Irish form examined were males and females in both winter and summer plumage and were dated from Donegal, Sligo, Mayo, Galway and Kerry. Four males from the Outer Hebrides (Lewis, N. Uist and Benbecula) were like the Irish specimens.

As Kleinschmidt's description of *Tetrao hibernicus* appears first on p. 3 of *Falco*, XV., the name of *Lagopus scoticus hibernicus* (Kleinschmidt) must be applied to the Red Grouse from Ireland and the Outer Hebrides.

As a fuller description will appear in the last part of the *Practical Handbook of British Birds* it is only necessary here to state briefly that both sexes in winter plumage are paler and more yellowish, especially on the under-parts, which are finely and closely barred with black; there is very seldom a patch of black on the abdomen of the male, which is barred like the rest of the under-parts; the feathers of the belly and under tail-coverts have either no white tips or only narrow ones.

As is very well known there is considerable variation in Red Grouse from Great Britain and it is probably on this account that British authors, who have remarked on the distinctions of the Irish Grouse, have hesitated to separate it definitely. The British Museum collection contains a very fine and representative series of Red Grouse from Scotland, Ireland and Wales, which when arranged according to sex and season is strikingly different from the series of Irish and Outer Hebridean birds. I am also indebted to Dr. H. Gadow for Irish specimens lent from the Cambridge University Museum of Zoology to assist in my comparison.

ON THE NAMES PROPOSED BY RENNIE IN MONTAGU'S ORNITHOLOGICAL DICTIONARY.

BY

THE REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U.

IN 1831 a new edition of Montagu's *Ornithological Dictionary of British Birds* was published under the editorship of James Rennie. In this work two generic names and three specific names are proposed for the first time, mainly (as stated by the author) because the names which they were intended to replace "served to propagate error or absurdity." The two generic names (*Anorthura* and *Nyctichelidon*) are included in most lists of synonyms and need not be discussed here. With one exception the specific names have no importance and can also without hesitation be relegated to the synonymy, but it is strange that in spite of the intensive study of the older authors which has been carried on of late years, these names seem to have been generally overlooked.

The three names referred to are (1) *Fringilla spiza*, proposed for the Chaffinch, *F. cælebs* L. (p. 78); (2) *Motacilla Lotor* for the Pied Wagtail, *Motacilla alba* L. (p. 377) and (3) *Corvus predatorius* for the Rook, *C. frugilegus* L.

The only one of the three which requires consideration is that of the Pied Wagtail, and in this connection it must be remembered that the striking difference between the Pied and White Wagtails had been noted long before Gould made his communication to the Zoological Society of London and also used the name of *Motacilla Yarrellii* in the list of plates in his *Birds of Europe* in 1837. It is true that Temminck's *Motacilla lugubris* was a mixture of birds from Russian Siberia and other sources, but it must not be forgotten that Vieillot also described the British race under the same name as Temminck and pointed out the differences between the two races of Wagtail in the *Encyclopédie Methodique*, II., p. 404.

On page 377 of the second edition of the *Ornith. Dictionary* there is an article on the "Pied Wagtail (*Motacilla Lotor* Rennie)," in which Rennie remarks: "It being manifestly absurd to name this the *White* Wagtail, as Linnæus does, I have changed the specific to *Lotor*, in accordance with an expressive provincial name." Then follows Montagu's description of the Pied Wagtail, with notes on its habits and nidification as observed in the British Isles. Rennie evidently was unaware that the Scandinavian bird differed from our native form, and it has been decided by a majority of the B.O.U. List Committee that this is a "substitute" name, and can therefore be disregarded.

NOTES

A JACKDAW'S WAY OF COLLECTING NESTING MATERIAL.

WHILST motoring along Portsdown Hill, Hampshire, on April 19th, 1923, I noticed a bird larger than a Starling settle on the back of one of several horses grazing. The bird flew off the first horse to a second, and then on to a third. As our car approached I identified the bird as a Jackdaw (*Colæus m. spermologus*), and the third horse as very mangy. The Jackdaw pecked a beak full of hair out of the mangy horse and flew off, obviously to her nest.

Neither of the three horses appeared to object to this cavalier treatment, whilst the third horse continued grazing during the whole procedure.

CECIL SMEED.

[We have seen Jackdaws perched on cattle and taking hair from their backs on several occasions and probably the habit is not very uncommon.—EDS.]

SMALL BROODS OF CIRL BUNTING.

DURING the month of July, 1923, I examined three nests of Cirl Bunting (*Emberiza cirlus*) in the neighbourhood of Martock, Somerset. One contained two young birds, another had only two eggs, and another three. I have only met with one nest with four eggs in this neighbourhood since June, 1919, viz., a nest found on June 15th, 1922, which contained four hatching eggs.

JOSEPH H. SYMES.

NEST OF SWALLOW WITHOUT MUD.

IN the course of my ringing expeditions in South Carmarthenshire I came across what struck me as being a very curious nest of a Swallow (*Hirundo r. rustica*). It was in a shed with a V-shaped galvanised iron roof. To the supports of the roof had been nailed strips of wood at intervals of about a foot, and the space in between had been filled with dry rushes. In the course of time some of the rushes had slipped down in such a way as to form a sort of ledge where the strips of wood held them up. The nest was situated on one of these ledges which served as the foundation of the nest, for there was no mud at all. A few bits of the finer grasses and two or three feathers were all the material the birds had brought to the nest. At the time of ringing I judged the nestlings to be 16 days old

(the tail-feathers were projecting about one-third of an inch beyond the sheaths) and I had visited the nest eight days previously ; so I presume it is quite impossible for the birds to have moved from some properly constructed nest, and I could find no trace of a mud nest in the shed. J. F. THOMAS.

[In the Dobrogea, where Swallows are not uncommon, but there is little dry land, most of the country consisting of reed beds and shallow lagoons, we found Swallows' nests built entirely of flowering tops of reeds, with no admixture of mud whatever.—F. C. R. JOURDAIN.]

FLEDGLING PERIOD OF SWIFT.

MR. DAVID HAMILTON, a friend of mine and a very capable field ornithologist, has been making observations on two pairs of Swifts (*Apus a. apus*) nesting in the roof of a large tenement in Warrender Park Road, Edinburgh. It was on May 30th, 1913, that Mr. Hamilton first searched for the nests here and discovered two pairs sitting on their nests—the one pair on the old nest of a Starling and the other pair about a foot off on a nest composed of a few feathers ; in each case the pairs were sitting side by side on their nests and were not disturbed when a lighted candle was placed near them. Even when the hand was put under the birds to feel for eggs, of which there were not yet any, a bird in each nest, presumably the female, did not stir, though their mates flew off. On June 17th, Mr. Hamilton crawled along the housetops to another hole where he had observed Swifts and found a nest with two highly incubated eggs—both birds were on the nest. On June 7th, 1919, these nesting sites were occupied, two nests having two eggs and one nest three eggs ; in each case the birds were sitting and were quite unconcerned when they were lifted off their eggs and put back again, one bird Mr. Hamilton actually put in his pocket to take out into the light that he might examine it ; these three birds were sitting close when revisited on the night of June 12th. This year, 1923, Swifts appeared abnormally early and to-day, August 25th, they are still flying in numbers before my window. I myself saw them first at Duddingston on April 26th, but Mr. Hamilton had already seen three in the company of a few Common Swallows on the 4th over the River Esk at Musselburgh ; he had these Swifts under observation at a short distance for over ten minutes. From the 6th they had disappeared, but were seen by him at Duddingston on the 25th. Swifts were in force on May 2nd.

Then, as there had been a cold spell and the Swifts had not been seen, Mr. Hamilton thought he would visit the roof where they had nested for years and there he found five or six Swifts all huddled together on the straw of an old Starling's nest; they allowed him to lay a lighted candle beside them and to stroke them on the back without showing the slightest fear.

Mr. Hamilton visited two nests in the roof regularly from June 1st to find out something of the fledgling period, and I think it best to transcribe his notes.

June 1st. Nest No. I. had two eggs.

June 12th. Nest No. II. had two eggs.

June 20th. Nest No. I. hatched.

Nest No. II. eggs incubated, lifted the birds off and laid them down again. As it was early in the morning when I was up this time, in each case both birds were sitting side by side. None of them went out while I was there.

June 30th. Nest No. II. hatched; young blind and very helpless objects.

Young of No. I. coming on.

July 14th. Nest No. I. Young seem fully grown, the white of the chin and forehead very marked; were still unable to fly and only crawled about, although their wings look fully developed; they are now twenty-four days old.

Young of No. II. coming on fine, but wings quite short.

July 20th. Nest No. I. All the birds were in; put the old birds out to see if the young would follow, and although I put a young one to the entrance of the hole it scuttled back to the nest; they are now 31 days old and don't seem to have the power of flight yet.

The young in No. II. are well on now also.

July 21st. No. I. Thinking there would be a chance of the Swifts being out in the middle of the day I went up at 12 o'clock but found them in the nest and not inclined to venture out when I examined them.

July 24th. Nest No. I. When I went up this morning there were no signs of the young; 35 days.

Nest No. II. Young still unable for flight.

July 25th. Went up again. The old birds from both nests and young from No. I. cleared out as I approached, they are beginning to resent being disturbed so much (5 a.m. summer time).

Young of No. II. will not fly for some time yet.

July 28th. Swifts again visited and only young of No. II. in, all other birds on the wing; the young were very restless when handled and crawled rapidly about, working their wings as in flight but made no attempt at going out.

Birds from No. I. never came back after this.

July 30th. Young of No. II. still in nest.

August 1st. Visited No. II. nest again at 5 a.m. As it was very dull and pouring rain, the whole family were in but as I came near with the light I heard the old birds screaming and saw them scramble to the entrance and launch into the air. The young scuttled about again but made no attempt to go out.

- August 8th. Early astir this morning at 3.30 a.m., made my way along to nest No. II. silently and in absolute darkness. When I got to the now familiar spot I flashed on an electric torch and found the Swift family, young and old, sitting side by side all in a row sound asleep. I counted them and touched them before they were aware of my presence. When the old birds wakened they seemed startled and blinded but went right to the hole and out into the almost darkness; the moon was shining at the time; the young made no attempt to follow, these birds have been longer than No. I. in flying.
- August 11th. When I went up this morning I heard a scuffling as I got near the nest but found they were all away.
- August 14th. Nothing to be seen of Swifts for two days. Looks as if they had left the district.

WILLIAM SERLE.

TAWNY OWL FEEDING YOUNG IN AUGUST.

ON August 13th, 1923, near Dalston (Cumberland), I heard the familiar hooting of a Tawny Owl (*Strix aluco sylvatica*). A few seconds later, hearing a scuffling noise in the upper branches of a roadside tree, I looked up and beheld a young Owl being fed by an adult. The young Owl was on a branch, but the adult was keeping a stationary position in the air by rapid beating of its wings, and the latter occasionally striking the branch produced the scuffling noise. Just before I reached the tree the adult left and flew past me, and I identified it as a Tawny Owl. The young Owl, which was fledged, remained on the same branch (which was about 25 feet from the ground) uttering at intervals "Keewick, keewick."

Later in the day, revisiting the same tree, the young Owl was found on a branch about 15 feet from the ground. I closely examined the bird's plumage, both upper and lower, and it was certainly a young Tawny Owl. R. H. BROWN.

LITTLE GREBE AND COOT LAYING IN SAME NEST.

ON April 19th, 1923, whilst strolling round a pond close to my house at Westbourne, Sussex, I found a nest of a Little Grebe (*Podiceps ruficollis*). The nest contained four partly incubated Little Grebe's eggs, and one egg of a Coot (*Fulica atra*). The latter was addled.

Has this combination been recorded before?

CECIL SMEED.

[Coots' eggs have frequently been recorded from the same nest as Moorhens, and also with both Great Crested Grebe and Red-necked Grebe, but I have no record of the eggs having been found in a Little Grebe's nest.—F. C. R. JOURDAIN.]

EARLY LAYING AND INCUBATION PERIOD OF
STONE-CURLEW.

With reference to Major C. Smeed's note on the probable double broodedness of the Stone-Curlew (*Burhinus a. edicnemus*) (*antea* p. 65), I should like to mention that May 5th is a remarkably early date for eggs to be hatching (that is if the editorial note is correct in giving 26-27 days as the incubation period) and perhaps lends additional support. I have never known or heard of earlier eggs than those found near Blandford, Dorsetshire, on April 11th or 12th (1915).

As regards the incubation period, many years ago I timed a second laying and, although I only made a mental note, I am strongly under the impression that the length of time was 23-24 days.

W. J. ASHFORD.

[May 5th is certainly an early date for a clutch of Stone-Curlew's eggs to be hatching but a writer in the *Field* (May 17th, 1902) records two eggs "almost hatching" on May 5th, 1902. With regard to the incubation period, the statement in the *Practical Handbook* (26-27 days) rests on the authority of Messrs. E. W. Wade & E. G. B. Meade-Waldo, confirmed by Herr Loos and to some extent by Mr. W. Farren (who estimates it at about 28 days). Naumann's estimate of 16-17 days is obviously wrong, but F. M. Ogilvie suggested 24-25 days as the probable duration.—F. C. R. JOURDAIN.]

ON THE FEEDING HABITS OF THE RUFF.

As the habits of the Ruff (*Philomachus pugnax*) are so strange and instructive, I venture to put on record a few observations. Naturalists have usually limited themselves to the investigation of these birds on the fighting "hills," while my observations were made on the feeding grounds. I would hope, therefore, that my meagre notes may not be entirely worthless. I believe that every shred of evidence with regard to the Ruff may have value, as the bird furnishes one of those instances, rather rare in Nature, of a psychic abnormality or exaggerated instinctive tendency. In the domain of human psychology the study of the abnormal has opened the way to the comprehension of the normal functioning of the mind, and it may be that in the important allied study of animal behaviour the investigation of the Ruff's habits may help to elucidate the fundamental problem of the nature of instinct.

During several days of the second week of June I spent a considerable time in a hiding tent pitched beside a shallow

pool on the Waalenburg Polder, Texel Island. Redshanks, Ruffs and Reeves, Kentish Plover and Avocets were the birds which usually came to feed. The fighting "hills" or "hill" (the birds fought at three different places near enough together to be considered as one "hill") was situated about 150 yards away and there was a Reeve's nest with four eggs some 80 yards off.

I very soon proved the statement of some ornithological works, that the Ruff does not feed by day, to be inexact. Both Ruffs and Reeves came to the pool throughout the day, feeding in a more leisurely manner than the bustling Redshanks which were common visitors. Far from cordial relations seemed to exist between these two species, and I watched a Redshank chase a Reeve right away. Ruffs are generally reputed to be the most silent of the waders, but on several occasions I heard them make a rough croaking noise, by no means powerful, which I took to be a sign of resentment or anger.

Occasionally there were several Ruffs at the pool at the same time and I was then interested to note that the combative tendency is not confined to the operations at the "hill." I watched and photographed one handsome bird viciously chase another across the pool, the birds running swiftly through the shallow water.

Although hidden within a few feet of the Ruffs I found it impossible to note exactly on what the birds were feeding. They did not appear to have any special meal hours, birds resorting to the pool, morning and afternoon alike.

EDWARD A. ARMSTRONG.

RECOVERY OF MARKED BIRDS.—*Correction*—(*antea*, p. 78). SONG-THRUSH, G.243, was recovered at the same place in June, 1914, two months after ringing, and not in June, 1923, as stated. The report of the bird's recovery was not received until 1923.

PASSING OF THE TERN COLONY AT MALAHIDE, CO. DUBLIN.—With reference to the Malahide (co. Dublin) Tern colony (*antea*, Vol. XVI., pp. 168–170), Col. H. A. F. Magrath writes that the Terns did not breed in Malahide in 1923; flocks are said to have been seen flying over the old breeding ground in the beginning of the summer, but they failed to stay, and soon disappeared.



LETTERS



THE COLOUR OF THE IRIS IN THE JAY.

To the Editors of BRITISH BIRDS.

SIRS,—In connection with Dr. Riviere's and Mr. Witherby's notes on the colour of the iris in the juvenile Jay (*antea*, p. 82) it is, I think, worth mentioning that the adult also has an inner ring of brown close to the pupil, surrounded by a broader ring of bluish- or greyish-white. In an adult ♂ shot in late April the inner ring is almost maroon in colour, and the blue area is flecked with pinkish-brown. I have noticed the brown ring and flecks in other adults, chiefly winter specimens, but the colour is not usually so bright as in this ♂.

MARJORY GARNETT.

DALEGARTH, WINDERMERE, 3rd September, 1923.

FOLKLORE OF THE LADY HEN OR SKYLARK IN SHETLAND.

To the Editors of BRITISH BIRDS.

SIRS,—While in Shetland I learned from Mr. Laurence Williamson of Mid Yell, who is well versed in the folklore of Yell, that the nest of the Skylark (*Alauda a. arvensis*) is looked upon as being sacred, and in this association he supplied me with the following traditional lines, a deterrent curse to the violation of the sanctity of the nest.

“ My malediction stick to dee
As the tar sticks to the tree
And spread ower dee
As butter spreads ower bread.”

Another inhabitant of Mid Yell, eighty years of age, confirmed this and related how her grandfather warned her never to touch the nest of the “ Lady hen ” for as it mounted it sang the praises of heaven.

This may be worthy of being recorded as no mention is made of it in Swainson's *Provincial Names and Folklore of British Birds*, but the author's suggested origin of the Skylark's Shetland name of Lady hen, i.e., Our Lady's Hen, is of a confirmatory nature.

Apparently this Skylark folklore is not general throughout Shetland for on the south of the mainland it appears to be unknown.

WILLIAM E. GLEGG.

September 7th, 1923.

DIPPER NESTING IN WILTSHIRE.

To the Editors of BRITISH BIRDS.

SIRS,—With reference to Dr. N. H. Joy's note, page 86, on the nesting of the Dipper (*C. c. britannicus*) in Wiltshire, it may be of interest to know that this species appears to have been established in the Nadder Valley for at least the past thirteen years.

Records of nests found by me near Salisbury were published in Vol. XIII., page 314.

D. W. MUSSELWHITE.

WANDSWORTH COMMON, September 17th, 1923.

NESTING OF THE WHIMBREL AND CURLEW IN SHETLAND.

To the Editors of BRITISH BIRDS.

SIRS,—I am much interested in the account of the breeding of the Whimbrel (*Numenius phaeopus*) in Shetland (*antea*, p. 70). I have some knowledge of Shetland, having visited it annually in the summer months for twenty years, with the exception of 1915–1918.

I concur in all your correspondent writes, but he omits what is most striking to me, viz., the great increase in the Common Curlew (*N. a. arquata*), especially in the last few years. When I first knew Shetland I was struck with the scarcity of the Curlew on what appeared most suitable ground. The Whimbrel then was a little, not much, commoner than at present, and was then, as now, very local, and I did not hear of its having been much commoner. Possibly the increase of the Curlew may have something to do with the present scarcity of the Whimbrel as well as the great increase in both species of Skua. I may add that in one area where there are very few Skuas, the Whimbrel have gone, and their place is taken by Curlews.

E. G. B. MEADE-WALDO.

STONEWALL PARK, KENT, *Sept. 6th*, 1923.

SHOULD THE "LARGER GULLS" BE PROTECTED?

To the Editors of BRITISH BIRDS.

SIRS,—It is curious to notice the divergence of opinion by ornithologists of the usefulness or otherwise of some of our birds.

A case in point is well illustrated by two observations in the August number of *British Birds*.

The one by Mr. H. M. Wallis advocating a very considerable reduction in the numbers of the Great Black-backed Gull in the Scilly Islands (p. 58), and the other an appeal by Mr. Stanley Lewis to ornithologists and the public not to molest the same bird on the island, Steep Holm (p. 67), not so very many miles away from Scilly. I can assure Mr. Lewis that if a colony of Great Black-backed Gulls once gets established on Steep Holm, it will be to the detriment of the other feathered denizens of the island.

We have seen what the great colony of Herring and Lesser Black-backed Gulls has done to the Guillemots and Puffins on Puffin Island, in Anglesey.

The bird colonies on our southern coasts are not very large or numerous, and if the larger Gulls are to be encouraged and protected as suggested by Mr. Lewis, these colonies will certainly become smaller by the destruction of the weaker and more defenceless birds by these murderers and thieves.

HERBERT MASSEY.

BURNAGE, DIDSbury, *August 22nd*, 1923.

-1 OCT. 1923



STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS, which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND



TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.

F. H. L. WHISH,
LYMPHAM, SOMERSET.

Ready October 1st, 8vo., pp. i.-xvii. and pp. 1-42,

5/- net.

A BIBLIOGRAPHY
OF
BRITISH ORNITHOLOGY
FROM THE EARLIEST TIMES

SUPPLEMENT

A CHRONOLOGICAL LIST
OF BRITISH BIRDS

BY

H. KIRKE SWANN, F.Z.S., M.B.O.U., &c.
Corresponding Fellow of Amer. Orn. Union

THE purpose of this work, which forms a first supplement to *A Bibliography of British Ornithology*, and its companion volume *A Geographical Bibliography of British Ornithology* by W. H. Mullens and the author, is to give the names of all the species and subspecies of birds on the British list arranged in order of the dates when they were first scientifically described, the work in which the description and accepted specific name first appeared being indicated. In brief it is an attempt to summarise the history of the names of British birds from the earliest times to the present year. The older authors (in which the specific names are found) are indicated, thus distinguishing between adapted names and newly invented ones. The list of genera prefixed is likewise arranged in the order of their creation; those names simply taken from old authors are indicated, as well as those created from specific names, while original names are distinguished and their meaning given. Alphabetical lists of discarded generic and specific names with their equivalents in the new nomenclature are also appended.

LONDON

WHELDON & WESLEY, LTD.

2, 3 & 4, ARTHUR STREET, NEW OXFORD STREET

1923

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

NOV. 1.
1923.

Vol. XVII.
No. 6.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NOW READY.

THE BIOLOGY OF BIRDS

BY

Professor J. ARTHUR THOMSON.

A new and comprehensive volume by this well-known natural history writer, whose work on various aspects of bird life has attracted such widespread attention.

Fully Illustrated.

16/- net.

The New Statesman says:—"The Biology of Birds' is not merely one of those books which are to be recommended, as pleasant and instructive reading, to those interested in natural history and outdoor life. It is indispensable to them."

SIDGWICK & JACKSON LTD., 3 Adam St., London, W.C.2

THREE BEAUTIFUL BIRD BOOKS

Illustrated by **ROLAND GREEN.**

Uniform Size 10×7½ ins.

"Field."—"Of the illustrations it is impossible to speak too highly,"

N.B.—"The coloured plates are more than worth the price."

BIRDS AND THEIR YOUNG.

By **T. A. Coward.**

With twelve mounted Coloured Plates and 32 Black and White Plates. Cloth, with Coloured Wrapper, **10/6 net.** Just ready.

BIRDS ONE SHOULD KNOW.

By **Theodore Wood.**

With eight mounted Coloured Plates, sixteen Black and White Plates, and 185 Text Illustrations. Cloth, with Coloured Wrapper, **10/6 net.**

BIRDS IN FLIGHT.

By **W. P. Pycraft.**

With twelve mounted Coloured Plates, eight Black and White Plates, and nine Line Illustrations. Cloth, with Coloured Wrapper, **15/- net.**

GAY & HANCOCK, Ltd.

34, HENRIETTA STREET, COVENT GARDEN, W.C.2.

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 6, VOL. XVII., NOVEMBER 1, 1923.

	PAGE
Homing Pigeons and Pigeon-Racing. By B. B. Riviere, F.R.C.S., M.B.O.U.	118
Notes from Staffordshire. By A. W. Boyd	139
Notes :—	
Variation in Breeding-Season of Wheatear (J. F. Thomas)	143
Shag Inland in Cheshire (A. W. Boyd)	143
Birds at Staines Reservoir, Middlesex (William E. Glegg) ...	143
Unusual Nesting-site of Redshank in Cumberland (R. H. Brown)	144
Green and Wood-Sandpipers, Spotted Redshank and Greenshank in Cheshire (R. M. Garnett and E. W. Hendy)	144
Large Clutch of Curlew's Eggs (H. W. Robinson)	146
Sandwich Tern in Somerset (Rev. F. L. Blathwayt) ...	147
Moorhen Carrying Young (John R. B. Masfield)	147
The Hebridean Red Grouse (Seton Gordon)	147
Letters :—	
A Habit of the Lesser Redpoll (Rev. F. L. Blathwayt) ...	148
Cuckoo Laying Twice in the Same Nest (E. P. Butterfield)	148
Should the Larger Gulls be Protected? (Stanley Lewis) ...	148

HOMING PIGEONS AND PIGEON-RACING.

BY

B. B. RIVIERE, F.R.C.S., M.B.O.U.

I HAVE frequently been struck by the fact of how little most ornithologists seem to know about the work of Homing Pigeons and the sport of Pigeon-racing, and this is all the more surprising when one considers that both are concerned with subjects which are admittedly of great ornithological interest. The Homing Pigeon is the only bird whose flight-velocity can be at all accurately estimated over any measured distance, whilst the journeys which long-distance Racing Pigeons are called upon to take are comparable to those undertaken by migratory birds, as are the difficulties which they have to overcome, and the weather conditions which are favourable or unfavourable to their successful accomplishment. Whether the faculties by means of which they find their way home are the same in both, is perhaps still a matter of opinion.

Any knowledge, however, which can bring us nearer, be it ever so little, to an understanding of Bird-Migration should, I think, be recorded. It is, I believe, only by the marshalling of a vast array of proved facts, before attempting to build up theories, that all the difficulties of this fascinating problem will ever be solved, and it is possible that amongst these facts, some which can be learnt from a study of the work of Homing Pigeons, may be found useful in filling up gaps in the chain of evidence which will eventually lead us to complete knowledge.

It is for these reasons, therefore, and because I have kept and raced Pigeons for several years, and found the sport one of absorbing interest, that it occurred to me to record as briefly as possible in the following paper the more important facts which are known at the present time regarding the capabilities and limitations of the modern Racing Pigeon.

Besides my own practical experience of Pigeon-racing and a study of the literature upon the subject, I am indebted for a very great deal of information to Captain W. D. Lea-Rayner, M.B.E., of Wroxham, Norfolk, Secretary of the East Anglian Championship Club, whose valuable help I gratefully acknowledge. Captain Lea-Rayner, besides being a very successful Pigeon-racer of many years standing, was for three years (1919-21) officer in charge of the Carrier Pigeon Service in Ireland, when he had under his personal supervision the management, training, and working of 2,500 birds. I am therefore very fortunate in having his exceptional experience and knowledge of the subject placed at my disposal.

In drawing any analogy between the performances of Pigeons and those of Migratory birds, two facts must be borne in mind :—

Firstly, the Homing Pigeon is, as is well known, a domesticated form of the Rock-pigeon (*Columba livia*)—one of the least migratory of all birds. It is indeed upon its fixed and permanent love of one spot—its home—and its urgent desire to return thereto at all seasons, that one depends in making use of it as a messenger, though for racing purposes one takes advantage of the additional incentive of eggs or young ones to return to. Secondly, whereas practically all migratory birds travel by night, though some by day as well, Pigeons can only fly by daylight, and are helpless after dark. During the war experiments in night flying were attempted with the Army Pigeons in France. The young birds in one loft were exercised, when hungry, at a later and later hour each evening until they were eventually flying in the dark, and were fed into the loft by the aid of a red lamp. They were then liberated singly after dark at gradually increasing distances from the loft, being again fed in by the red lamp. It was found, however, that immediately the distance was increased to a stage when the red lamp could no longer be seen, the birds became hopelessly lost, and the experiment was given up (Lea-Rayner).

The qualities which go to make a good Racing Pigeon are to a marked degree hereditary. One can only breed Pigeons which will race from a strain of racers. Nor can one breed birds to fly in the long-distance races (400–600 miles) from Pigeons which for generations have only flown in short races (100–200 miles), but they can only be bred from a strain of “long distance” birds.

Although the pedigree of every British Racing Pigeon goes back eventually to imported Belgian birds, the modern British racer is as good, and for our conditions of climate probably better, than any in Belgium to-day.

That the long and severe process of selection to which it has been subjected has improved it very greatly within the last few decades, there can be no doubt. Forty years ago a flight of 300 miles in the day into England was considered a wonderful performance. Nowadays races of 500 miles are more often won on the day of liberation than not.

DISTANCES FLOWN.

It was not until the year 1886 that 400 miles was flown on the day into England by Racing Pigeons. In this year two

aces were flown from this distance, the first from La Rochelle on July 17th and the second from Nantes on July 20th. The La Rochelle race was won by Mr. J. Logan, whose bird homed on the day of liberation, flying 444 miles, and making a velocity of 1,012 yards per minute (35 m.p.h.). In the Nantes race Mr. J. O. Allen's winning bird made a velocity of 1,385 yards per minute (47 miles per hour), having 447 miles to fly, whilst eleven other birds got home in the day, the wind being reported as light N.W. by W.

Ten years later, in 1896, 500 miles was flown in the day in the North Road Federation race from Thurso, Scotland, on June 29th, the winning bird making a velocity of 1,454 yards per minute (49 m.p.h.) and flying 501 miles. In this extraordinary race Pigeons which had only been trained over the first 80 miles of the race route homed in the day, the weather conditions being perfect, with a N.N.W. (tail) wind blowing along the whole route.

In 1897 on June 29th, in a race of the West Lancashire Federation from Marennes, 39 birds got home in the day out of a total of 144 liberated, the winning bird flying a distance of 530 miles and making a velocity of 1,213 yards per minute (41 m.p.h.).

In the year 1900, 600 miles in the day was flown for the first time, several birds accomplishing this feat in the National Flying Club race from Bordeaux on July 10th. Mr. J. W. Toft, whose measured distance in this race was 598½ miles, having four birds home before nightfall.

In a race from Lerwick, Shetland Isles, on July 2nd, 1902, a bright, clear day with a N.N.W. wind, four birds flew over 605 miles in the day with velocities ranging from 1,306 to 1,153 yards per minute, the winning bird flying 598 miles and making a velocity of 1,459 yards per minute (49 m.p.h.). (*Squills' Annual*, 1907, p. 5 *et seq.*)

The number of consecutive hours upon the wing which the above performances entailed can be estimated from the distances flown and the velocities made, but the longest recorded period of continuous flying appears to be that of a Pigeon in the Marennes race of 1906 belonging to Mr. Deignan of Jarrow. The liberation in this race was at 4.30 a.m., and the bird reached its loft at 10.41 p.m., having covered a measured distance of 634 miles 1,681 yards in 18¼ hours. (*Squills' Annual*, 1907.)

As regards notable distances which have been flown by Racing Pigeons over periods of more than one day, the record up to 1907 was, I believe, from Bordeaux to Aberdeen, a

distance of 854 miles. This was in the Bordeaux race of 1902, the liberation being on July 8th, and Mr. Henson of Aberdeen timing in his bird at 8.10 a.m. on August 2nd. (*Squills' Annual*, 1907.)

An even more remarkable performance, though not over so long a distance, is that of the celebrated Pigeon "Barcelona" belonging to Mons. Wouters Geurtens of Uccle, near Brussels. This bird flew from Barcelona, Spain, to Brussels, a distance of 700 miles, eight times in five seasons; making the journey twice within three weeks in the year 1906.

The longest recorded distance ever flown by an English Racing Pigeon was in the Rome race of 1913. The birds were liberated in Rome on June 26th; the first arrival into England being to Mr. Hudson's loft at Derby on July 29th, that is on the thirty-third day after liberation, the distance flown being 1,001 miles. Only one other English bird reached home in this race out of 106 sent.

In America, however, where a straight course of 1,000 miles can be flown overland, and where the climate and atmospheric conditions are probably more favourable for flying, this distance has frequently been successfully negotiated. In the year 1885 a Pigeon belonging to Mr. R. L. Hayes of Philadelphia, Pa., flew from Florida, a distance of 935 miles, in 11 days, whilst the same year three other birds flew distances of 1,000 miles in 20, 26 and 38 days respectively. (*The Breeding and Training of Racing Pigeons*. Publisher: Chas. F. Hoser, Vineland, N.J., 1902.) Even better times over these distances have, no doubt, been done in America in more recent years.

All the above performances are those of trained Pigeons flying on a route over which they have been previously trained. It may therefore be of interest to relate here a few instances of untrained Pigeons (or Pigeons which have been trained only in a different direction) finding their way home over wide stretches of unknown country. Two of the best known and most remarkable examples of such homing without previous experience are the following, for the details of which I am indebted to Capt. Lea-Rayner:—

An afterwards celebrated Pigeon, "Scotch Queen," belonging to Capt. E. E. Jackson, of Wheelton, Lancashire, was trained 50 miles due south of her loft, and then sold to a fancier at Thurso. She escaped some time later in mid-winter and arrived at Wheelton either the same day or the next, having crossed some 400 miles of unknown country.

A Dublin fancier imported a Pigeon from the loft of Mons. Debaille of Lethervelde, Belgium, which on escaping from

its new home returned to Lethervelde—a journey which entailed the negotiation of the Irish Channel, the whole breadth of Wales and England, and the English Channel.

Another instance occurred recently in the case of a bird belonging to my friend Major Winch of Swanington Court, Norwich. Major Winch races his birds on the "South route" from France, and none of them is ever trained to the North of his loft. At the end of last racing season he sold a Pigeon which had flown in a race from France to a gentleman at Berwick-on-Tweed, and the bird, being accidentally liberated, returned to Swanington, over 200 miles of strange country, in the day.

It must be remembered, however, that such instances as the above, especially in the case of untrained Pigeons, are quite exceptional, and taking into consideration how small a percentage they represent compared with the number of cases in which birds under similar circumstances become hopelessly lost, one is almost tempted to regard them as "flukes."

CROSSING THE SEA.

Pigeons, as was pointed out by Dr. Tresidder in a very interesting letter to the *Racing Pigeon* (August 12th, 1922), appear to have little or no fear of the sea, but will fly over it as readily as they will over the land. Hundreds of cross-channel races are flown into England every year from France and the Channel Islands, and several from the Shetland Isles, and although these races show a higher percentage of losses than those which are flown overland, the birds appear to attempt the sea-passage unhesitatingly, even under unfavourable weather conditions.

In the Irish Grand National race, which is flown from Landerneau, France, the birds have the English Channel, the Bristol Channel at its widest part, and St. George's Channel to cross, and this race is perhaps the severest test of any for a racing Pigeon.

In 1895 *Le Petit Journal* of Paris organized a "Maritime" race, which appears to have created a considerable amount of interest at the time, and which took place on June 30th. Fifteen hundred Pigeons from various French and Belgian lofts were taken in S.S. "Manoubia" to a point 125 miles due west of St. Nazaire where, after certain overnight festivities on the part of the organizers, which included a banquet, a concert, and a display of fireworks, they were liberated at 4.30 a.m., none of the birds having had any previous overseas training. The returns were reported to be

excellent, and the velocities exceptionally high. (*Homing News*, 1895, p. 381.)

The correspondent of the *Homing News* who was present at the liberation, states that the birds rose to "double the height customary to land tosses"—a height which he estimated at "650 yards" (i.e., nearly 2,000 feet)—and that they spent far less time in circling round than is usual in an overland race, before getting away. (*Ibid.*)

The same year another "Maritime" race was organized by Mons. Dufours, of the Club La Colombe, Marseilles, a convoy of Marseilles Pigeons being taken by steamer to a point "122 miles from Porguerolles Island, and 80 miles from Sardinia," where they were liberated at 4.15 a.m. After beating about for a time and once more alighting on the ship, at 4.30 a.m. they all went away straight towards Marseilles, and all but one reached their lofts the same afternoon, their minimum straight line flying distance being stated to be 190 miles. (*Homing News*, 1895, p. 243.)

In 1912 a race was flown from the Faeroes—roughly 200 miles from the Outer Hebrides, the Shetlands, the Orkneys and Cape Wrath. A hundred Pigeons were liberated on June 21st under very bad weather conditions—it being reported as very thick between the Faeroes and the Orkneys—and the long confinement in the baskets having no doubt had a very bad effect on the birds' condition. Only two worked their way home, the first arrival being to the loft of Mr. Long of Harrow (a distance of over 800 miles) on July 13th. During the War, Capt. Lea-Rayner informs me, distances of over 200 miles of sea were several times flown by Air Force Pigeons when liberated from seaplanes with messages and reports.

Many instances might be cited of Pigeons having crossed the North Sea, independently of any race. The late Dr. Dalley of Syston had a bird which was competing in a race from Lerwick, Shetland Isles, reported from Holland. The Dutch fancier into whose loft it went released it when fit, and it homed to Syston in good time. (Lea-Rayner.)

A Pigeon of my own, liberated last season at Marks Tey (about 65 miles from home) in the course of training, under very bad weather conditions (thick mist), was captured early the following morning on board a ship within sight of the Dutch coast, whilst Dr. Tresidder reports that a bird of his which he sold in 1921 to a gentleman in Arbroath disappeared in the process of "settling" to its new loft, and was reported a few days later from Bergen, Norway. (*Racing Pigeon*, August 12th, 1922.)

VELOCITIES.

In Pigeon-racing, the distance between each competitor's loft and the liberation or race-point is measured in a straight line by means of the "great circle" system of measurement. The Pigeon's flying time is reckoned from the moment of liberation to when it enters its loft. It must then be caught and a numbered rubber race-ring removed from its leg and placed in a "racing clock" which, upon a lever being pressed, stamps upon a dial the time in hours, minutes and seconds. Each competitor's "clock" has, the day before the race, been set to Greenwich time and locked by a special "clock committee," and upon the day following the race the clocks are opened by the same committee, the race-ring numbers checked, any variation in gain or loss of the clocks worked out, and the velocities estimated.

The velocity the Pigeon makes is estimated by dividing the distance flown by the time taken, and is recorded in yards per minute, the Pigeon making the highest velocity winning the race.

Now in this method of estimating a Pigeon's flight-velocity, as practised in Pigeon-racing, two facts may be pointed out: Firstly, no allowance is made for the preliminary "circling" round which always takes place, sometimes, e.g., in bad weather conditions, for a considerable time, when a convoy of Pigeons is liberated, before they break away and set off for home. Secondly, it is extremely unlikely, to say the least of it, that Pigeons can or do fly an absolutely dead straight line home, and in fact all the evidence goes to show that they do not do so. It follows, therefore, that the actual velocity that every Pigeon makes in a race must always be considerably greater than that with which it is credited.

In a letter to *British Birds* (Vol. XV., p. 298), I quoted the following high velocities made by Racing Pigeons, selected from a list of record velocities published in the *Racing Pigeon* of January 7th, 1922.

Distance flown.						Velocity.			
80 miles at the rate of						82 miles per hour			
366	"	"	"	"	"	...	...	65	"
416	"	"	"	"	"	...	...	60	"
501	"	"	"	"	"	...	...	60	"
501	"	"	"	"	"	...	...	52	"
601	"	"	"	"	"	...	...	57	"
727	"	"	"	"	"	...	...	28	"

As, however, no information was given with the records as to the force and direction of the wind, they cannot be regarded as true air-velocities, but are only of interest as an indication of what a Pigeon is capable of doing under favourable conditions.

The actual air-velocity made by a flying bird can only be estimated by an exact knowledge of the angle and force of the wind along the course of its flight, and this, except in the case of a dead head or tail wind, as will be seen later, presents a mathematical problem of some complexity.

As, however, the Homing Pigeon lends itself in a peculiar degree to an investigation of this kind, I decided to attempt to estimate the true air-speed of the winning birds in a series of nine races flown by the East Anglian Federation during the season of 1922. Through the kindness of the Superintendent of the Meteorological Office I was able to obtain exact data of the force and angle of the wind over the whole line of flight at various altitudes, from the time of the liberation to that of the arrival of the winning bird in each of these nine races, and in the working out of the results I was fortunate enough to obtain the services of Mr. O. Glauert, Aerodynamic Adviser to the Aeronautical Department of Messrs. Boulton & Paul, and late Mathematical Master at Norwich Grammar School, to whom my best thanks are due.

Even with these data as regards wind, a measured flying distance, and exact timing, there remain several unknown or variable factors which must enter into one's calculations and which constitute a possible margin of error, and though the results are, I believe, as exact as can be obtained, they must be at the best only approximate. These unknown factors I may enumerate.

Firstly, the Pigeon's actual velocity must always be considerably greater than the velocity with which it is credited, for the two reasons which I have already stated, namely, that no time is allowed for the preliminary flying round which always takes place, and from the fact that its flying distance is measured in a straight line which it is quite certain it does not adhere to. Also in several of these test races the wind was found to vary considerably, not only in force but in direction, during the time the race was being flown, and in these cases the mean force and direction had to be taken. Again, it was impossible to know at what altitude each race was flown, and where it was found that the force of the wind varied at different altitudes it was necessary to adopt an average altitude. I shall have more

to say later on regarding the height at which Pigeons fly, but for the purposes of working out these air-speeds, the average altitude was (when necessary) reckoned to be 1,000 feet.

With the wind at any angle to the line of flight, i.e., in every case except a "dead" head wind or tail wind, it was found necessary to work on two different hypotheses:—

A.—Assume that the Pigeon constantly changes its course so that it always flies towards its goal. The path of the bird in this case is the well-known "Curve of Pursuit," and an analysis of the formula giving its length shows that the air-distance flown is independent of whether the whole journey be taken in one or more stages, i.e., independent of whether the bird simply makes for home all the time or whether it makes for one or more intermediate points lying along the shortest distance, or to put it another way—whether it "tacks in" only at the end of its journey, or several times during the course of it.

That this is the true hypothesis there can be little doubt, in support of which I may quote Col. Osman, editor of the *Racing Pigeon*, who writes:—

"The idea that our Pigeons fly straight along the line from race-point to home is all wrong. They give a good deal to the wind, and then have to tack in at the finish when within the home circuit." (*Racing Pigeon*, 1923, p. 439.)

B.—Assume that the bird so sets its course that it does not depart from the straight line giving the shortest distance between the two points. In this case it would be obliged to fly with its head pointing at an angle to the straight line to its goal, i.e., it must consciously head for some point not in the direction of its home.

The formulæ and method used by Mr. Glauert in working out the air-speed on these two hypotheses, I will now quote in his own words:—

V = Air-speed of bird.

v = Wind-speed.

β = Angle between original direction of flight and direction of wind.

r = Direct distance to be flown.

t = Time taken over the journey.

$e = v/V$.

In Case A. $Vt = \frac{r}{1-e^2} \left\{ \sqrt{1-e^2 \sin^2 \beta} - e \cos \beta \right\}$

In case B. $Vt = \frac{r}{1-e^2} (1 - e \cos \beta)$

In the recorded velocity of a Pigcon race the speed of the bird is given as though it had flown in a straight course and there had been no wind, in other words, the speed U is given $U=\frac{r}{t}$.

Hence the above equation becomes in case A :

$$V=\frac{U}{1-e^2}\left\{V\sqrt{1-e^2}\sin^2\beta-e\cos\beta\right\}$$

and in case B. :

$$V=\frac{U}{(1-e^2)}(1-e\cos\beta).$$

All the quantities in these equations are known except V , which also appears in e ; the equation must therefore be transformed in order to express V explicitly in terms of the other quantities; we thus get :—

A. $V=VU^2-2Uv\cos\beta+v^2$
B. $V=\frac{1}{2}\left\{U+\sqrt{U^2-4Uv\cos\beta+4v^2}\right\}$

From these equations V is fairly readily computed.
The results calculated by these methods, in the nine selected races, were as follows :—

Race.	Race- Velocity in yards per minute.	Air-speed in yards per minute. Calculated on hypothesis.	
		A.	B.
1. Romford to Yarmouth ...	1,309	1,168	1,163
2. Croydon to Lowestoft ...	1,747	1,195	1,193
3. Croydon to Norwich ...	1,668	997	995
4. Guildford to Lowestoft ...	981	1,315	1,307
5. Guildford to Lowestoft ...	1,112	1,310	1,302
6. Winchester to Lowestoft ...	1,497	911	796
7. Bournemouth to Lowestoft ...	1,190	906	903
8. Brighton to Lowestoft ...	1,292	1,060	1,026
9. Ventnor to Norwich ...	1,097	1,282	1,262

Worked out in miles per hour, the air-speeds are found to vary between 30–45 miles per hour. It is interesting to note that the three highest air-speeds made, namely in races 4, 5, and 9, correspond to the three lowest race-velocities, and these were the only races in which the birds were flying against a head wind. This is only what one might expect, a bird naturally putting forth a greater effort when flying

against the wind, than when being helped by it. In all the other races the wind was more favourable than unfavourable, and in races Nos. 2, 3, and 6, which show the highest "race-velocities," it was practically a "tail" wind.

Other causes of the variations in these air-speeds may be looked for in the varying times taken in circling round at the race-point before making for home, and in the varying amount of deviation from the shortest possible line of flight which the Pigeons made in finding their way home. Neither of these factors being allowed for in one's calculations, the Pigeons' true air-speed must, as I have already pointed out, in each case be considerably more than the result shows.

ALTITUDE OF FLIGHT.

I can find very little recorded information regarding the height at which "travelling" Pigeons fly. Like other birds, they naturally fly at a considerably greater altitude in a "tail" wind than when battling against a head wind. I have occasionally seen Pigeons of my own, when in the course of training they have been liberated singly at a distance from home, rise to a height at which they appeared as mere specks in the sky and which I estimated to be over 3,000 feet. Whilst one Pigeon will do this, the next bird, liberated five minutes afterwards, will as likely as not make off at an altitude of only a few hundred feet, and I have noticed that certain individual Pigeons, when liberated alone, habitually fly at a much greater height than do others.

Capt. Lea-Rayner, whose great experience makes his opinion a very valuable one, believes that in fine weather most Pigeon races are flown at an altitude of between 1,000 and 3,000 feet, and he is supported in this opinion by the results of some experiments which were made during the War with the Army Pigeons. In these experiments Pigeons were liberated at various altitudes from aeroplanes, and it was found that when liberated between 1,000 and 3,000 feet the birds proceeded on their journey at the same height. When, however, they were taken up to higher altitudes, they immediately dropped down to 3,000 feet. A large number of Racing Pigeons which I once saw coming across the Channel in a race from Guernsey were, however, flying at a height which I estimated to be considerably under 1,000 feet.

LOSSES AND WEATHER CONDITIONS.

The losses which occur in the ordinary course of training and racing Pigeons will perhaps to the uninitiated appear

surprisingly high, and go far to dispel the theory held by the “man in the street” that Pigeons home naturally by “instinct.”

Capt. Lea-Rayner, in a letter to me upon this subject, writes as follows :— “ It is a little difficult to state an average loss, particularly as no fancier I have ever met really confesses his gross losses in training and racing ! In stocking a loft I always like to allow for the following losses in training and racing, and further, I think that the loft which shows better figures is doing pretty well :—

Young birds raced up to 150 miles	...	50 per cent.
Remainder as Yearlings, raced up to 250 miles	... ..	50 per cent.
Remainder as Two-year olds, raced up to 400-500 miles	... ..	75 per cent.

“ Thus, if I start the year with 100 youngsters, I should not be disappointed if I had 50 do 150 miles well this year, 25 do 250 miles well next year, and 5 do the 500 miles journey afterwards.

“ The yearling and two-year old figures include the Channel loss, barring out and out ‘ disasters,’ which are invariably due to weather conditions.”

One may now consider the causes of these losses, and in so doing, I will leave the most important cause—namely, bad weather conditions—to the last. When a Pigeon is lost in fine weather, provided it is physically fit, and has undergone a properly graduated training and has not been “ jumped ” an unreasonable distance, one may probably attribute its failure to get home to one of the following causes :—

1. Lack of “intelligence.” It may seem a truism to say that a Pigeon gets lost through a deficiency in the senses by means of which it finds its way home, but this is what it amounts to, and this quality of “intelligence” whether it be an “eye for country” and a memory for landmarks, or a “sense of direction” is found to vary in a very marked degree in individual Pigeons, as well as in strains.

2. Lack of sufficient desire or determination to get home (also a varying quality in individual Pigeons).

3. The Pigeons’ love of flying in company. This, next to bad weather conditions, is probably the commonest cause of Pigeons getting lost, and on this account, as also for other reasons, it has an important bearing on Pigeon-racing. Pigeons, and especially young ones, when flying at exercise or in training, can seldom resist joining any other flock of Pigeons

which may pass over. Old birds will as a rule quickly break away from the strangers, but young birds will sometimes fly with them, just for the love of flying, until they are carried so far from home and the country they know that they lose their bearings, and when they break away are unable to find their way back. Fanciers have from time to time reported the loss of the whole of their young birds in this way, and it frequently happens that one's team of youngsters are away for nearly the whole day, and come dribbling back in ones and twos late in the evening, or even next morning, absolutely "flown out" and with several of their number missing.

On race days throughout the Pigeon-racing season (practically all Pigeon-races are flown on Saturdays) tens of thousands of Pigeons are on the wing flying both from North and from South and to every town in England, and to the clashing and mixing up of these various flocks a large percentage of the losses which occur are certainly due.

Another result of this liking which Pigeons have for flying in company, and one which is very well recognized by all Pigeon-racers, is that of making it very difficult for a loft to compete successfully in races when it is situated at all wide of the line of flight which the majority of the competing birds take on their way home. Thus East Anglian fanciers, whose lofts are comparatively few and far between, can never successfully compete in any of the open National races from France, owing to the "drag" of the thousands of Pigeons going up a narrow line of country to the Midlands, Cheshire, and Lancashire, which are the great Pigeon-racing centres. It has been proved beyond all doubt that the East Anglian birds are unable to break away from this huge flock, and if they do, it is only after they have been carried so far to the N.W. that they are obliged to fly two sides of a triangle to get home. (See "The Influence of the Drag," Logan's *Pigeon Racers' Handbook*, p. 30.)

The most important cause of losses in training and racing Pigeons comes, however, under the heading of "Bad Weather conditions," and we may now consider what are the conditions of weather which are most prejudicial to Pigeons finding their way home. When analysed these, I believe, may be summed up in the words "Bad visibility," and to support my own experience, which I know to be also that of all Pigeon racers with whom I have talked, I will quote two very high authorities.

Mr. John Logan, President of the National Flying Club and the founder of the most celebrated strain of English

long-distance Racing Pigeons writes : " I wish most strongly to impress upon beginners that unless a bird can see his way home he cannot do even the shortest distances . . . for on a foggy day, when a bird cannot see a hundred yards on either side of him, he cannot find his way home, if even taken only two or three miles away," and again : " Let me impress on the mind of beginners one thing above all others—namely, that without clear weather the very best birds in the world cannot do well, for the Pigeon sees, and does not feel his way home." (*Pigeon Racers' Handbook*, pp. 3 and 18.)

Col. Osman, Editor of the *Racing Pigeon* writes : " We attribute good returns to good visibility . . . On days when there is a stiff moving wind—no matter from what quarter so long as visibility is good—Pigeons get home. The days to lose Pigeons are those with overcast skies and drizzling rain over the course, with poor visibility and a bad light." (*Racing Pigeon*, May 19th, 1923.)

Capt. Lea-Rayner, in a letter to me upon this subject, describes what he considers as the most disastrous type of weather for a cross-Channel race as : " Fine, sunny (a lovely day to " the man in the street "), wind very light east, hot, dry and hazy."

Heavy rain, especially if accompanied by a cold head wind, is also very disastrous to Racing Pigeons. Apart from the bad visibility which it entails, if it is long continued the birds' plumage becomes so saturated that they must come down, and if this happens on a sea passage it is, of course, the end of them. With heavy storms followed by a drying wind and good visibility birds will probably get home in inland races, as they will come on again when dry.

Another bad type of weather is that preceding and during a thunderstorm, under which conditions Pigeons appear to " panic " and lose their heads, and are very frequently lost.

Lastly, an east wind, even when it is " a helping " wind, is regarded with disfavour by Pigeon-racers, and I believe with good cause. Certainly it seems that with the wind in this quarter Pigeons do not race as well, nor are the returns so good, as with a westerly type of weather. The presence of mist or haze, and consequent bad visibility, which so often accompanies an east wind may account for this to a great extent, but I think not entirely, for I have noticed that my own Pigeons when at exercise will seldom fly for as long a time, or with the same freedom and appearance of enjoyment in an east wind, as they will when the wind is from a westerly quarter.

HOW DO PIGEONS FIND THEIR WAY HOME?

Before embarking upon this much debated subject, I think it may be as well here to describe as briefly as possible the usual methods which are employed in the training of Racing Pigeons. Young Pigeons are usually put into training when they are between eight and twelve weeks old, at which age they will probably be flying voluntarily for several hours a day when turned out for exercise, and will have gained some knowledge of the country immediately surrounding their loft. The method of training them is to liberate them at various points along as straight a line as possible towards the first race-point from which they will have to compete, the intervals between the stages being gradually increased the further they get from home. Dr. Barker, a very successful Pigeon-racer, states (*Squills' Annual*, 1905) that the stages which he employs in training his young birds are as follows: 1, 2, 4, 7, 12, 20, 35, 55, 75 and 100 miles, and these are about the average stages which are used by the majority of trainers. These young Pigeons may then fly in three or four young bird races, the distances of which may be anything up to 150 or 200 miles. There are a few clubs which fly a 300 mile young bird race, but this distance is, by the majority of fanciers, considered to take too much out of young birds, especially if the weather should happen to be unfavourable. The distances between these young bird races will probably be something between 20 and 30 miles, and the race-points are so arranged that they are on as straight a line as possible towards the more distant race-points from which the birds will have to fly as "old birds" in the following years. Next year, as yearlings, and each succeeding year of their racing careers, the survivors of these young birds will be trained over exactly the same course on the way to the longer races, the object being to refresh their memories of the line of country, and to get them physically fit, but each year the stages used may be fewer, and the intervals "jumped" longer. The last four race-points for "old birds" of the East Anglian Championship Club, with which my own birds fly, are as follows:—

Eastbourne (135 miles from my loft); Caen, France (249 miles); Laval (327 miles) and Marennes (482 miles). It will be seen that having flown Eastbourne (135 miles), the birds are lifted—usually in their second season as yearlings—115 miles, across the Channel, to France. Usually they make this journey in company with a certain proportion of birds

which have flown the Channel before, but I shall have occasion to refer to this later on. The distance between the last two race-stages is, it will be noted, over 150 miles.

It will be seen from the foregoing, that in the training of young Racing Pigeons, one places no reliance upon any so-called "Homing Instinct"—if one means by this term not an instinctive desire to get home, but an instinctive ability to do so—but that in the early stages of their education one is obliged to teach them the way home very carefully by a series of flights from graduated stages. Every Pigeon-racer will agree that, were one to credit untrained Pigeons with any such instinct, one would very rapidly lose them. If Pigeons homed by "instinct," one would expect this to be equally developed in every individual Pigeon; training and education would be unnecessary, the results of Pigeon-races far more uniform, and every bird physically capable of flying the distance would get home. How far this is from being the case, will be gathered from what has already been said upon the subject of losses, where it was shown how variable in individuals are the faculties by means of which Pigeons home, and that even under a system of carefully graduated training, only five Pigeons out of every hundred can be got to negotiate successfully a distance of 500 miles. The paramount importance of conditions of good visibility in enabling a Pigeon to find its way home has already been laid stress upon (p. 131), and it will by now have become apparent to my readers that Pigeons home chiefly—and some experienced Pigeon-racers believe entirely—by means of a remarkable power of vision, together with exceptional powers of observation and a wonderfully retentive memory for the configuration of a country they have once flown over. Additional evidence in support of this may now be given:—

A Pigeon when circling round after being liberated at a distance from home is obviously *looking* for its bearings, and one can see its head turning in all directions as it looks about it. Sometimes Pigeons, through having been lost, or for some other reason, learn a roundabout way home which they will afterwards persist in flying, and unless by re-education they can be taught the correct route, they are on this account useless for racing purposes.

Col. Osman writes (*Racing Pigeon*, Sept. 15th, 1923, p. 673) :
From the end of 1914 until the end of 1918 I did not train a bird on the race route I fly. . . . This was a big handicap when I started again. I had to take birds off short-distance g-zag coast work, and put them on straight long-distance

work, and I found that they almost invariably came home *via* the coast, instead of the straight course." It would be interesting to know the answer those firm advocates of instinct have to give to the persistency of Pigeons to home from the direction from which they had a lot of training in early life.

A hilly country is well known to be the most difficult of all to train and race Pigeons over, and entails a loss of birds far in excess of that which is met with in a flat country. So much is this so that the fanciers of Lancashire and Cheshire, when they tried to train their birds across country to the east coast *en route* for the Shetland Isles, found the Yorkshire hills to be such an insuperable difficulty that they were obliged to give up the attempt to train across them. (J. Logan, *Pigeon Racers' Handbook*, p. 52.) On the other hand, any line of flight which includes a considerable stretch of coast-line is found to be the easiest of all for Pigeons to fly. (*Ibid*, p. 50.)

As an instance of a Pigeon's memory for a particular line of country, I may quote the following, in the words of Mr. John Logan: "Mr. J. O. Allen bought a yearling bird in Antwerp that had done very good work as a young bird in Antwerp over the usual Belgian training ground into France. This bird Allen brought to his loft at Smedley near Manchester. It was bred from one season, then accustomed or used to Allen's loft; he then put it on the road with his young birds and it did very well indeed. So next season Allen put him on the road with his old birds and trained him down to London and Mid-Channel between Dover and Calais, and the bird made excellent time back to Manchester for two seasons running. Next season (we were then training the S.E. route via Dover, Calais and Arras) Allen was tempted to send the bird on to Arras, which was very close to the line of country that the bird had travelled when flying from Paris to his home at Antwerp as a young bird. Immediately the bird . . . found himself over country that he knew, and instead of going back to Manchester, which he had done twice from mid-Channel, he slipped off back to his old home at Antwerp." (J. Logan, *Pigeon Racers' Handbook*, p. 46.)

To sum up, therefore, the better defined the landmarks and the less interrupted the view of the country over which he has to fly, the more easily will a Racing Pigeon get home, whereas should his view of the route be blocked by high hills, or obscured by conditions of bad visibility, he is very liable to become lost.

It only remains to consider whether these faculties of keen eyesight, powers of observation, and memory for landmarks are the sole means by which a Pigeon finds his way home, and whether they suffice to explain all that Racing Pigeons can do.

We have seen how, in training Pigeons for racing, although at first one has to treat them like fools, and proceed by very short and easy stages in order not to lose them, yet the more experience they have, and the further the training "tosses" take them from home, the greater the liberties one may take with them, and the bigger the "jumps" of unknown country they may be safely given to negotiate; and I have often asked myself what faculty or sense it is that one thus educates and develops. After my Pigeons have flown Southend (80 miles), as often as not they are then sent on to Eastbourne, a jump of 55 miles, which they usually fly as successfully as they do when given an additional stage in between; whilst when the 100-150 miles' stage has been flown, Pigeons may fairly safely be lifted another 100 or even 150 miles. As I have already stated, a "jump" of this size is usually made in company with Pigeons which have flown it before, but this is not always so, and the fact remains that trained Pigeons can successfully negotiate 100 or even 150 miles of absolutely strange country without any assistance of this kind.

In the year 1912 sixteen Pigeons from His Majesty the King's loft at Sandringham were placed at the disposal of Dr. Tresidder for an experimental liberation at Dieppe. These were all birds which were bred in August 1911, and which had had no training the year of their birth. In 1912 they flew Bishops' Stortford (70 miles), Blackheath (100 miles) twice, and Heathfield in Sussex (140 miles) once, and were then lifted to Dieppe, a distance from Sandringham of 220 miles, and a jump from the last stage of 80 miles, including the Channel. They were held over at Dieppe for two days owing to fog, and were then liberated at noon on July 15th in hazy weather with a N.E. wind—very unfavourable conditions. None reached home on that day, but on the following day no less than eight arrived at Sandringham, the first bird at 5 o'clock in the morning. (Dr. Tresidder, *Pigeon Racing Disasters*, p. 41.)

Could these birds, in hazy weather, see and recognise the country round about Heathfield, 80 miles away across the Channel?

In 1922, when the East Anglian Championship Club was formed for the purpose of organizing long-distance races from

France, the training and racing of Pigeons had, owing to the war, been in abeyance between the years 1914-1919, and East Anglian lofts contained very few experienced birds, and fewer still which had flown the English Channel. An analysis of this Club's first season's racing is therefore of some interest from the point of view of the subject under discussion. For the following details I am again indebted to the Club Secretary, Capt. Lea-Rayner.

The first race was from Caen, which is situated 9 miles inland from the French coast, 250 miles from Norwich, and 114 miles from Eastbourne, the last stage which probably the majority of the birds had flown.

The convoy consisted of 217 Pigeons, of which 134 were yearlings, 53 two-year olds, 21 three-year olds, and 9 older. None of these birds had been to Caen before, and of the 217, only 12 had flown the Channel before and these had done so either from Jersey (80 miles west of Caen) or from Rennes (100 miles S.W. of Caen). The race was won by a yearling, who had previously flown no further than Staplehurst in Kent, and 75 per cent. of the birds were home by the evening of the second day, at least two of the twelve birds which had previously flown the Channel being amongst the absentees.

The second race was from Laval, a jump of 77 miles of fresh country from Caen, and 327 miles from Norwich. Result, 50 per cent. of the birds home before the evening of the second day.

The last race was from Marennes, 482 miles from Norwich, and a jump of 155 miles of unknown country beyond Laval. Fifty per cent. of the birds were home by the evening of the fourth day, and the second bird was a yearling which had been "jumped" from Caen, a distance of 232 miles.

Again, one must ask oneself: Could these Pigeons, when liberated at Caen, see the coast of Sussex 114 miles away? Could the Marennes birds see and recognize country which they had only once seen before, at a distance of 155 miles?

Either the answer must be in the affirmative, or else one must accept the theory of a "sixth sense" by means of which the birds were able to travel in the right direction until they reached country which they recognized. Although we have no knowledge, so far as I am aware, of the power of vision in birds, yet I believe that the limit of horizon visible at an altitude of 3,000 feet is 58 nautical miles. But, in any case, if it were purely a question of eyesight,

how is it that untrained Pigeons cannot find their way home, even from very much shorter distances?

We have seen (p. 121) that Pigeons do occasionally home over wide stretches of unknown country from a different direction to that in which they have been trained, but that these occurrences are so rare as almost to justify their being regarded as flukes. If, however, the interval of unknown country is more or less a continuation of the line they have been accustomed to fly, Pigeons can find their way across it.

Why is it that Pigeons can fairly easily negotiate 100 or 150 miles of strange country if this lie in the direction which they have been used to flying, but that if they are asked to do so from the opposite or a different direction, they almost invariably get lost?

One must remember that every Racing Pigeon is, as a rule, both trained and raced entirely in one direction, all the training stages and the intermediate race-points to which he is sent, lying in as straight a line as possible between his home and the most distant race-point. He always, therefore, has to fly in one and the same direction in order to reach his loft. For example, in the case of my own Pigeons, whenever they are liberated either in training or racing, they always have to fly N.N.E. to get home.

I believe that Pigeons in the course of their training—i.e., those which come through it successfully—besides acquiring a mental picture of the country over which they fly, also learn—and this is probably the most essential part—that they always have to fly in the same direction in order to get home, and that having learnt this, they are able, when liberated in country which is strange to them, to take this direction and to maintain it until they reach landmarks which they recognize.

I have several times seen my young Pigeons, when liberated at a fresh training stage in a very high wind, take a bee-line for home straight away across country, flying quite low and without any of the preliminary circling round which usually takes place upon these occasions. Not liking to get up high and have a look round owing to the wind, it seemed as though they thought they knew the right direction to try and decided to risk it.

In conclusion, therefore, I believe the answer to the question "How do Pigeons find their way home?" to be the following: Pigeons find their way home by means of remarkable powers of vision and observation, combined with a wonderfully retentive memory for the configuration of any country

which they have once flown over. In addition to these faculties, they acquire through training the knowledge that they must always steer one particular course in order to get home, and this they are able to do by means of an instinctive sense of geographical direction or consciousness of the points of the compass. When, therefore, trained Pigeons are liberated in strange country, the first thing they do is to fly round, "trying" all the points of the compass, and searching for any recognisable landmark. If they fail to recognise any of the country within their field of vision, they then take the direction which they have always been accustomed to fly, and maintain it until they reach some remembered landmark.

This instinctive consciousness of the points of the compass, which enables Pigeons to take the geographical direction which they have been used to flying, is, it will be observed, a very different thing to "homing by instinct," and it only enables them to reach home if the interval of strange country which has to be negotiated is a continuation, in a fairly straight line, of the route they have become accustomed to fly.

NOTES FROM STAFFORDSHIRE.

BY

A. W. BOYD.

IN December, 1922, I was passing the large Staffordshire reservoirs and found that duck were wintering there in great numbers ; since that date I have visited the locality whenever occasion offered—several times during the early months of 1923, but only three times during the summer, and on a few occasions during the autumn migration.

From an article I had read in *British Birds* (Vol. IV., pp. 104–112) I was prepared to see a good number of species, but not to find duck in such quantities.

It is evident (as was suggested in Messrs. Jourdain & Witherby's article) that the frequency of some species is influenced by the position these reservoirs hold between Trent and Severn.

A comparison between the birds seen on the Cheshire meres during the period is interesting : though the Cheshire waters are much nearer to the estuaries and the sea the number of duck seen on them never approached that of the Staffordshire birds ; in particular, Wigeon and Teal were infinitely more plentiful than they ever are in Cheshire. Clearly these Staffordshire localities are an important connecting link between the Trent and Severn valleys and their winter visitors reach them by routes that do not touch Cheshire.

Birds were in far the greatest numbers on the most westerly reservoir and to this the following notes refer unless otherwise stated ; we calculated that there were between three and four thousand duck on this one water on occasions. At times Gailey Pools also held a number of birds but never many in comparison.

I was accompanied by my wife on several occasions, by Mr. R. M. Garnett on January 13th, Mr. T. A. Coward on January 27th, Mr. H. E. Cocksedge on February 25th and Mr. K. Fisher on April 22nd and September 16th.

The following are details of some of the species seen :—

PEREGRINE FALCON. (*Falco p. peregrinus*.)

On January 27th one flew over the reservoir, but did not cause much excitement among the duck ; a small lot of Teal rose and it passed right through them without touching any. Shortly before, an aeroplane had passed over and caused much greater alarm ; all the duck to the number of several thousand had risen from the water and flown about for some time.

BEWICK'S SWAN. (*Cygnus b. bewickii.*)

From January 1st to February 25th there was a small herd of six on the water whenever we visited it. Usually they were tamer than the Mute Swans and allowed very close observation as they fed in shallow water. Of these six one only so far as I could see had black extending all along the culmen of the bill, but in all the basal part of the bill was fully orange-yellow and the plumage completely white.

On February 11th on a piece of flooded land not far from Bridgetown, near Cannock, was a herd of twenty-four swans. Twenty-three were Mute Swans and the other (which looked very small) proved to be a young Bewick's Swan ; its plumage generally was dusky and its bill dull white where in the other Bewick's it was orange-yellow.

Then on March 31st and April 22nd there was one on the reservoir differing from those we had seen before : it was quite dusky on the head and neck, but its bill was yellow and black, though not so clear a yellow as in the six birds seen in the same place earlier. April 22nd seems to be a rather late date.

GADWALL (*Anas strepera.*)

Four on January 13th ; on January 27th they were very wild, but Mr. Coward clearly identified two. From March 31st to June 3rd we saw a pair on each visit. On the last day mentioned they rose from the middle of a stretch of grass, but we searched in vain for a nest. Unfortunately many duck's eggs were taken by local boys and possibly these among them. They certainly looked as if they were nesting or had nested.

TEAL. (*Anas c. crecca.*)

Next to Wigeon the most abundant duck ; many hundreds throughout the winter months and still in large numbers in April ; a fair number in June and July.

GARGANEY. (*Anas querquedula.*)

On March 31st three (two drakes and a duck) were feeding along the edge of the water in a marshy patch among some low rushes ; on April 22nd there was still a pair present and Mr. K. Fisher saw them again on April 28th. Not seen after that date.

There seem to be few records for Staffordshire.

WIGEON. (*Anas penelope.*)

The most abundant duck till the end of March ; fully 1,000 on occasions and always in hundreds ; fully fifty on April 22nd ; an adult drake in May, June and July.

Seldom seen on Gailey Pools ; about twenty there on February 25th.

SHOVELER. (*Spatula clypeata*.)

Between twenty and thirty from December to April and again in September ; at least three pairs in June and July, evidently nesting.

POCHARD. (*Nyroca f. ferina*.)

In varying numbers from December to the end of February ; between 200 and 300 on January 27th and February 11th ; eight on July 21st.

At Gailey Pools a few only ; forty on February 25th.

TUFTED DUCK. (*Nyroca fuligula*.)

Always in fair numbers, but never very abundant. A good many seem to breed, and on July 21st I saw ducks with broods of two, six, seven and eight youngsters a few days old.

SCAUP DUCK. (*Nyroca m. marila*.)

A duck or immature male from December to February almost always near the same spot.

To my surprise I saw several undoubted Scaups—ducks or immature birds—on July 21st. It might be supposed that they were young Tufteds showing white at the base of the bill, but the white band on the face was far too broad and definite for that to be the case. Their presence seems difficult to explain. One or two remained through August and September.

A duck at Gailey Pools on February 25th and August 26th.

GOLDENEYE. (*Nyroca c. clangula*.)

From December to April 22nd always present and usually in some numbers. On several days in January, February and March fully thirty seen ; last seen on April 28th by Mr. K. Fisher. Adult drakes in the minority, but five or six on March 10th.

At Gailey Pools always a few up to ten in number ; five adult drakes there in February.

GOOSANDER. (*Mergus m. merganser*.)

Two brown-headed birds on December 23rd and January 13th and one until the end of February.

SMEW. (*Mergus albellus*.)

A fine white adult drake seen by Mr. R. M. Garnett and myself on January 13th on Aqualate Mere, near Newport—just inside the Staffordshire border.

BLACK-NECKED GREBE. (*Colymbus n. nigricollis.*)

On December 28th there was a small Grebe too far distant for definite identification, but on January 1st and again on January 13th we got an excellent view of it or one like it close to the water's edge and saw exactly the face pattern and shape of bill. It seemed generally rather more dusky than other Black-necked Grebes I have seen in winter.

RINGED PLOVER. (*Charadrius hiaticula.*)

A flock throughout August and September; seventeen on August 26th, the greatest number seen.

GREY PLOVER. (*Squatarola squatarola.*)

Two on September 30th.

DUNLIN. (*Calidris alpina.*)

A flock throughout August and September—from a dozen to twenty-one in number.

CURLEW-SANDPIPER. (*Calidris ferruginea.*)

We saw one on September 16th with a flock of Dunlins. I can find no record of its previous occurrence in Staffordshire.

On September 27th I saw two on the Sewage Farm at Clifton, near Manchester—some 60 miles distant.

LITTLE STINT. (*Calidris minuta.*)

One on September 2nd. Seen inland also in Lancashire and Cheshire. Mr. R. M. Garnett and I saw one on the Clifton Sewage Farm on August 23rd and Mr. K. Fisher and I saw one at Hurleston Reservoir, near Tarporley, Cheshire, on September 16th.

GREEN SANDPIPER. (*Tringa ochropus.*)

Once in winter—on January 13th; eight on July 21st, and a few in August and September

GREENSHANK. (*Tringa nebularia.*)

One on September 2nd.

BLACK TERN. (*Chlidonias niger.*)

We saw two immature birds on September 16th. In Cheshire single birds were passing at Marbury Mere, near Northwich, on September 1st and 22nd.

NOTES

VARIATION IN BREEDING-SEASON OF WHEATEAR.

THE remarkably mild winter and early spring seems to have had a great influence on the nesting operations of the Wheatear (*Æ. æ. ænanthe*) in 1923 on the south coast; for the first thirteen nests found at Seaford, Sussex, the average date of a full clutch of fresh eggs was April 28th—the earliest being April 24th, and the latest May 7th. Only one other nest was found and that had a full clutch on May 15th.

For the first eleven nests in 1922 the average date of a full clutch was May 12th—the earliest being May 4th and the latest May 19th; these dates are two or three days later than in 1921, but I have not the exact figures by me. It is interesting to note that, in spite of the cold weather which came on after May 6th, all the 1923 Wheatears were successful in their nests with the exception of one pair, and these had built so close to the entrance of the hole that the eggs could be seen quite easily in the nest.

J. F. THOMAS.

SHAG INLAND IN CHESHIRE.

ON August 30th, 1923, the day following a violent gale in the Irish Sea, and again on September 1st, I saw a Shag (*Phalacrocorax a. aristotelis*) on Witton Flashes, Northwich. At first it was evidently exhausted and allowed me to approach within a few yards as it rested among some cinders at the water's edge. It was a young bird with yellowish iris and plumage mainly brown with a green gloss on the back and wings. The Shag has seldom been recorded inland in Cheshire.

A. W. BOYD.

BIRDS AT STAINES RESERVOIR, MIDDLESEX.

THE following records were obtained during a visit to the reservoir at Staines, Middlesex, on September 9th, 1923. Five Black Terns (*Chlidonias niger*) were watched for an hour sweeping across the water, apparently they arrived during my stay for I did not see them at first. Although they dived repeatedly they never broke the surface of the water, which being like a mirror assisted this observation.

The Whimbrel (*Numenius phaeopus*) and the Ringed Plover (*Charadrius hiaticula*) were also identified. Neither were seen, but in each case the note was heard clearly and unmistakably.

A single Black-necked Grebe (*Podiceps n. nigricollis*) was seen. The identification of this species was based on the up-turned bill which was seen plainly.

I have previously recorded (Vol. XV., p. 90) the large numbers of Great Crested Grebes (*P. c. cristatus*) which frequent this reservoir after the nesting season. On this occasion I counted no fewer than 205 birds, the calmness of the water rendering an individual count easy. I have visited this reservoir occasionally for over ten years and have noticed that by far the greater part of the large congregations, which may be seen at certain periods, frequent the southern part of the reservoir, which, I must explain, is centrally divided by a bank running east to west. There is probably some controlling factor but it is difficult to make a suggestion.

WILLIAM E. GLEGG.

UNUSUAL NESTING-SITE OF REDSHANK IN CUMBERLAND.

THE Rev. J. R. Hale's note (*antea*, p. 88) on a curious nesting site of a Redshank (*Tringa t. totanus*) in Kent, reminds me of an unusual nesting-site which a pair of these birds selected in Cumberland, as recorded in my note-book for 1917. From late March onwards I observed a pair of Redshanks frequenting the banks of the River Eden where a lane joins this portion of the riverside with the main Carlisle-Brampton road. On April 24th I was walking down this lane when a Redshank flew out from the bankside uttering its well-known cry. On going to the place whence the bird had flown I found the nest with four eggs. The nest was on the top of the bank, underneath the hedge, and was a depression in the soil lined with a few bents but not enclosed by any tuft of grass. After the bird had been sitting a fortnight the eggs were taken and the Redshanks left the locality. As there are rough pasture fields (one quite marshy in character) on either side of this lane it is rather puzzling why these birds should have selected their nesting-site on a bank top instead of in a tussock of grass in one of the pasture fields.

R. H. BROWN.

GREEN AND WOOD-SANDPIPERS, SPOTTED REDSHANK AND GREENSHANK IN CHESHIRE.

THE following notes relate to a Sewage Farm in Cheshire which appears to be a very favourite resort of the Green Sandpiper (*Tringa ochropus*). I have notes of them for every month of the year excepting May, and as one was present right up to the end of April, 1922, I hoped there might be a

nest in the neighbourhood. In the spring of 1922 I had planted a number of old Thrushes' nests in suitable trees and bushes around the farm in the hope of providing them with accommodation. This year I never saw one between March 24th and July 14th, after which date they increased from two to five by the end of the month. August was a record month for them, numbers increasing to the 15th, when no less than ten were counted standing round the edge of one of the beds. Their numbers decreased at the end of the month to two, but on September 10th there were six present, after which date I did not see more than two on any one day. Excepting for the months of May and June it is really quite unusual to go round without seeing at least one bird of this species. I have never seen it perch anywhere but on the ground.

One Greenshank (*T. nebularia*) was present on August 26th, and one, probably the same bird, was seen on August 31st. This bird sometimes gave a double and sometimes a triple-note call.

A bird which I feel sure was a Spotted Redshank (*T. erythropus*) was present on August 21st. Unfortunately, not being familiar with the species, I did not look for the most obvious distinction from the Common Redshank (*T. totanus*), i.e., the absence of white secondaries. The points of difference I did notice were the longer red legs, longer bill slightly uptilted, and the call-note when it rose. This was a short double note sounding to me like "Tu-it."

A Wood-Sandpiper (*T. glareola*) was present feeding with a Green Sandpiper on October 13th and the different characteristics were easily seen. I should say it was a bird of the year as the back spots were large. The bird gave a sharp triple call which I should describe as "wee-wee-wee"—none of the "t" sound that the Green Sandpiper has in its call.

R. M. GARNETT.

MR. R. M. GARNETT informed me of the Spotted Redshank seen by him at the Sewage Farm mentioned in his note above, and this made me keep a look-out for it. On October 7th, 1923, I saw at the same Farm a bird of the year of this species. Fortunately it was very tame, and allowed me on several occasions to come within fifteen yards of it. The back and wings were dark brown, and I could clearly distinguish the white triangular spots thereon. The legs were pale orange-red, the bill black, perhaps owing to the fact that it was perpetually dibbling in the sewage sludge. There was a grey line through the eye, and a white superciliary

stripe ; the iris was dark. The breast was white, with pale brownish-grey striations on its upper portion and sides. The belly was white, and the head streaked with dark grey on the top, and lighter grey on the cheeks. When I put the bird up, I saw that the secondaries were dark ; there was no white wing-bar, as in the Common Redshank. The rump and upper tail-coverts were whitish, suffused with grey. I saw the bird at the same place on October 9th, 1923, and, on this occasion, heard the call-note twice. It certainly was not that of the Common Redshank. I should describe it as " weet-a-cheet, weet-a-cheet " the first time, and as " cheeta-weeta, chee-cheet, chee-cheet " the second time. Subsequently I examined the skins in the Dresser Collection at the Manchester Museum, and found there an immature specimen of *Tringa erythropus* which corresponds in all respects with the bird I saw. Apparently this is only the second recorded occurrence of this species in Cheshire, the other being a bird shot on the Dec Marsh near Burton in 1864. See Coward, *The Vertebrate Fauna of Cheshire* (1910), Vol. I., p. 411.

I saw a Greenshank at the same Farm on August 26th and September 2nd, 1923. Probably this is the same bird seen by Mr. Garnett on August 26th and 31st.

I also saw a Wood-Sandpiper at the same Farm on October 13th, 1923 ; doubtless this was the bird reported by Mr. Garnett. It was in company with a Green Sandpiper, and both while feeding and on the wing, seemed a smaller and slighter bird, with a lighter mantle ; its breast was faintly striated with greyish-brown. I should say it was an immature specimen. The legs looked light brown in sunlight and greenish in shadow. I did not hear its call.

As to the Green Sandpipers reported by Mr. Garnett, my visits to the Farm have been less frequent than his, but I have notes of them in September and November 1922, and in January, March, August, September and October, 1923. On the 22nd September, 1923, I saw three, but since then have not seen more than one on one day. E. W. HENDY.

LARGE CLUTCH OF CURLEW'S EGGS.

IN June 1923 a nest of a Curlew (*Numenius a. arquata*) containing a clutch of five eggs, was found on a remote part of Lambrigg Moor, near Grayrigg, Westmorland.

H. W. ROBINSON.

[I have notes of eight other occasions on which five eggs have been found in the nest of this species.—F.C.R.J.]

SANDWICH TERN IN SOMERSET.

ON September 26th, 1923, I saw a Sandwich Tern (*Sterna sandvicensis*) on the shore in Porlock Bay. Terns are rarely seen on the Somerset coast, the opaque waters apparently not suiting their fishing habits, and there appears to be only one established record, previous to this one, of the occurrence of the Sandwich Tern in Somerset.

F. L. BLATHWAYT.

MOORHEN CARRYING YOUNG.

MR. SHENTON, of Tean, informs me that one day last month (September 1923) when driving to Alton he saw a Moorhen (*Gallinula ch. chloropus*) pick up a young one in its beak and fly over the hedge with it. The parent bird, when he first saw it, showed great agitation, tumbling about the road and then ran to the grass at the side, where the young one was picked up. Mr. Shenton knows the Moorhen well, and is quite certain as to the identification of the species. I have never known this to have occurred before, but no doubt the young bird, which was a very small one (a late hatch), being at a distance from the pond, caused this incident to occur.

JOHN R. B. MASEFIELD.

THE HEBRIDEAN RED GROUSE.

MR. WITHERBY'S instructive article (*antea*, p. 107) on the Red Grouse (*Lagopus s. hibernicus*) of Ireland and the Outer Hebrides puts me in mind of three interesting peculiarities of the Outer Hebridean Grouse. (1) It nests almost three weeks later than its relatives of the mainland. (2) It lies much closer on the ground and when disturbed seems never to fly any distance. (3) The cock is less vociferous than the old cock Grouse of the mainland.

SETON GORDON.



LETTERS



A HABIT OF THE LESSER REDPOLL.

To the Editors of BRITISH BIRDS.

SIRS,—The observation made by Messrs. Ingram and Salmon (*antea*, p. 94) on the Lesser Redpoll (*Carduelis l. cabaret*) removing the materials of its nest to another site, tends to confirm what I consider to be an occasional habit of this species. I remarked on this habit in the *Zoologist* (1903, p. 26) and gave instances which came under my observation at Oxford in 1898 but no subsequent correspondents were able to confirm my theory. It would be interesting to know whether any other observers during the last quarter of a century have noticed this "habit," or are we to conclude that it is quite exceptional? Has the habit been noticed in other species?

F. L. BLATHWAYT.

CUCKOO LAYING TWICE IN THE SAME NEST.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Edgar Chance records (*antea*, p. 98) two instances of two Cuckoo's eggs having been found in one nest—one, that of a Meadow-Pipit containing three eggs of a Cuckoo, two of which "are unquestionably the product of one female" and two of the dupe, the other found in the nest of a Reed-Warbler and both eggs "emanated from the same female." These two cases corroborate the views I expressed in the *Naturalist* for May and July, 1918, that, at least occasionally, a Cuckoo will lay two eggs in the nest of its dupe, but this was contested at the time.

E. P. BUTTERFIELD.

SHOULD THE LARGER GULLS BE PROTECTED?

To the Editors of BRITISH BIRDS.

SIRS,—In reply to Mr. Herbert Massey's letter (*antea*, p. 116), I wish to point out that I simply ask for the Great Black-backed Gull to get a sporting chance to re-establish itself on Steep Holm, from which it has been absent for probably a century. I think I voice the sentiments of all Somerset ornithologists when I say that we are proud to have this species once again on our list of breeding birds.

We shall extend to them "intelligent protection" which means that we shall not allow them to increase to such an extent as to cause any serious harm to the other breeding birds, and had this been put in force in the Scilly group a few years back, Mr. Wallis's description of the condition of Annet Island would probably never have been written.

Mr. Massey is in error when he states that I appeal to the public not to *molest* the birds; I ask for non-extirpation, my words are:—"Trippers do the real damage, they take every egg out of sheer ignorance and wantonness." This I maintain, and offer as an illustration the condition of things prevailing at our other island bird resort where approximately forty pairs of Ringed Plovers and fifteen pairs of Oyster-catchers, besides Lapwings, lay their eggs again and again but do not hatch, as trippers take them all.

Not twelve chicks all told had hatched out at the end of July this year.

There are no Gulls on this Island.

STANLEY LEWIS.

CHEDDAR, October 3rd, 1923.

The Oologists' Record.

A QUARTERLY MAGAZINE DEVOTED TO THE ADVANCEMENT OF OOLOGY IN ALL PARTS OF THE WORLD.

Vol. III. Now Current. 1st Volume 1920.

Vols. I. and II. can still be had.

Subscription 5s. per annum, post free to all parts of the World.

Is contributed to by the World's Leading Oologists and
Is the only Magazine devoted exclusively to Oology.

Published by Harrison & Sons, Ltd., 45, St. Martin's Lane, London, W.C.2

Editor: Kenneth L. Skinner, Brooklands Estate Office, Weybridge, Surrey

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS.

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND

Game Birds and Wild-Fowl of Great Britain and Ireland.

Written and Illustrated by
ARCHIBALD THORBURN, F.Z.S.

With 30 Plates in Colours showing 58 Species. In one Volume.
Imperial 4to. £5 5s. net.

The thirty water colour drawings, specially prepared and reproduced for this volume, have been arranged to give a series of pictures of the many beautiful species commonly known as Game Birds and Wild-fowl which inhabit or pay passing visits to the British Isles.

The author has added notes on the general habits of each bird, either from personal experience or based on the works of well-known authorities.

The Natural History of South Africa BIRDS.

By **F. W. FITZSIMONS, F.Z.S., F.R.M.S., Etc.**

Director, Port Elizabeth Museum.

With 10 Plates in Colour and numerous Illustrations from
Photographs, etc. Two Volumes. Crown 8vo. 12s. 6d. each.

LONGMANS, GREEN, & CO., 39 Paternoster Row, London, E.C.4

W. & A. K. JOHNSTON'S TRACKS OF BRITISH BIRDS CHART

Edited by **H. MORTIMER BATTEN, F.Z.S.**

The issue of this chart is an event of great interest to the large number of schools which now undertake Nature Study, to all Boy Scout and Girl Guide Organisations, and indeed, to everyone interested in Natural History throughout the land. The Tracks are drawn life-size, and printed in black and blue so as to assist the work of identification.

Price 4s. net each (Postage 4d. extra) From your Bookseller, or direct from the Publishers

W & A K JOHNSTON



EDINA WORKS, EASTER ROAD, EDINBURGH.

NATURELAND.

The Illustrated Magazine of Natural History.

"The kind of Nature Magazine we have wanted for some time."—

Westminster Gazette.

"We wish Dr. Renshaw every success."—*The Ibis.*

Write to-day for Illustrated Prospectus from the Editor, c/o

SHERRATT & HUGHES, 34, Cross Street, Manchester
DO IT NOW.

ard Room.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

DEC. 1.
1923.

Vol. XVII.
No. 7.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

"The kind of Nature Magazine we have wanted for some time."—

Westminster Gazette.

"We wish Dr. Renshaw every success."—*The Ibis.*

Write to-day for Illustrated Prospectus from the Editor, c/o

SHERATT & HUGHES, 34, Cross Street, Manchester
DO IT NOW.

NATURALISTS, PRIVATE COLLECTORS, &c.

Interested in the Birds, Birds' Eggs and Mammals of the
ALPS OF SWITZERLAND AND OF SPAIN, should send
particulars of their requirements to:—

E. FLÜKIGER,

Collector and Naturalist,

INTERLAKEN, SWITZERLAND.

CORRESPONDENCE INVITED.

NOW READY.

THE BIOLOGY OF BIRDS

BY

Professor J. ARTHUR THOMSON.

A new and comprehensive volume by this well-known
natural history writer, whose work on various aspects
of bird life has attracted such widespread attention.

Fully Illustrated.

16/- net.

The New Statesman says:—"The Biology of Birds' is not
merely one of those books which are to be recommended,
as pleasant and instructive reading, to those interested in natural
history and outdoor life. It is indispensable to them."

SIDGWICK & JACKSON LTD., 3 Adam St., London, W.C.2

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 7, VOL. XVII., DECEMBER 1, 1923.

	PAGE
The Whimbrel in Shetland. By Ralph Chislett, M.B.O.U., F.R.P.S.	150
Notes on Nesting Kingfishers. By R. H. Brown	155
Further Observations on the Birds of Lundy, June and July 1923. By Lewis R. W. Loyd	158
Notes on some Birds of the Swiss National Park. By W. H. Thorpe, M.B.O.U.	160
Notes :	
Late Nesting of Grey Wagtail (Howard Bentham)	165
Fire-crest in Surrey (Howard Bentham)	165
Great Grey Shrike in Surrey (Howard Bentham)	165
Hebridean Song-Thrush on Migration in Ayrshire (E. Rich- mond Paton)	165
Late Stay of Swift in Scotland (Audrey Gordon)	166
Cuckoo's Egg in Chaffinch's Nest (B. W. Tucker)	166
Scaup-Duck and Gadwall in London (W. M. Crook)	167
Probable Ferruginous Duck in Flintshire (F. A. Bates)	167
White Egg of Oystercatcher (L. J. Turtle)	168
Shag Inland in Somerset (B. W. Tucker)	169
Spotted Redshank in Shropshire (H. E. Forrest)	169
Avocets in North Kent (William E. Glegg)	169
Large Clutches of Curlews' Eggs (C. B. Chambers) (Evelyn V. Baxter and Leonora Jeffrey Rintoul)	170
Letters :—	
Birds removing Nesting Material to another Site (Geo. J. Scholey) (Clifford Borrer)	171
Nest Materials of Pied Flycatcher (Stanley Lewis)	171
Cuckoo laying twice in the same Nest (Geo. J. Scholey)	171
The Breeding of Racing Pigeons (R. H. Brown)	172

side of a heathery valley. The nest consisted of a hollow between short tufts of stunted heather and grass, and was slightly lined with a few grass stems and one or two bits of moss. The plant most conspicuously in evidence was a spongy sphagnum, growing everywhere in yellowish-white tufts. The date was June 16th and the eggs hatched a few days later. Both birds incubated. On June 21st, after I had entered the hide at 10.45 a.m., a bird returned to the eggs in ten minutes and exchanged duties with its mate at 1.53; the newcomer,



WHIMBREL RISING TO ACCOMMODATE A CHICK.

(Photographed by R. Chislett.)

was a slightly darker bird. When I examined the eggs before leaving they were "chipping."

The first two young to hatch (June 23rd) were led away by one bird whilst the mate continued incubation. The third chick remained at the nest except for periodical toddles round for a few yards, during one of which it passed the tent at the distance of a few inches. This day (June 24th) was cold, with a high wind, and if the chick remained away long the sitting parent sometimes left the egg to brood the chick, returning



WHIMBREL DRAWING NEAR TO EGG AND CHICK.
(*Photographed by R. Chislett.*)

to the egg in a few minutes. But she never seemed thoroughly satisfied and at ease if both egg and chick were not beneath her. On the following morning all had hatched.

The down of nestling Whimbrels is very similar to that of young Curlews, but the narrow, pale line down the centre of the crown and the broad, black-brown stripes on either side serve to distinguish them, as the similar markings do in the case of adults (whitish streak and brown stripes) even in photographs.

The gait of the Whimbrel as it approaches the nest is very different from that of the Curlew, and progress is much more rapid and direct. Curlews usually walk with dignified solemnity, approaching leisurely by devious courses until near to the nest, when they generally proceed to circumambulate the hiding-tent, pausing at each side in turn. The Whimbrels walked with rapid, jerky strides, each accompanied by a movement of the head and neck, almost directly to the nest. They were rather nervous at first of the sound of the camera shutter, but soon became quite used to it.

Whether the decrease in the number of Shetland Whimbrels is connected with the increase in the number of Curlews as Mr. Meade-Waldo suggests (*antea*, p. 116) I cannot say. From information contained in *A Fauna of the Shetland Islands* (1899), one would infer that both species had then decreased since Saxby's time. At present Curlews are certainly the more numerous, but if Curlews and Whimbrels were reckoned together they would still be less plentiful than the Curlew is upon many moors in Scotland and the north of England. The absence of Whimbrels from Hascosay certainly seems to have no connection with the presence of Curlews, for no Curlews bred there in 1921, and only an odd pair in 1922, whose first clutch was eaten by either Crow, Skua or Gull. In the other districts mentioned by Messrs. Buckley and Evans as the most favoured by Whimbrels, Curlews were also said to be "comparatively numerous"—comparatively that is with other parts of Shetland.

NOTES ON NESTING KINGFISHERS.

BY

R. H. BROWN.

On July 19th, 1922, I noticed an adult Kingfisher (*Alcedo a. ispida*) fly out of a nesting tunnel in a sandy bankside in Cumberland. At the end of the tunnel I discovered a nest with six young, which had not begun to feather except that the quill-feathers were developed, and these young were not feathered until July 26th, the last day I had the nest under observation. By the 29th they had flown. The nesting chamber was at the end of the tunnel, the young being on a mass of dry fish bones and scales, quite clean of all fæces, in marked contrast to the floor of the tunnel, which was covered with moist fæces. In order to reach the nesting chamber I had to enlarge the entrance hole and tunnel, and thus cleared all the fæces from the tunnel bottom.

I spent twenty-two hours, spread over three days, watching the parents feeding the young, and on July 22nd, the first day I watched the nest, the tunnel bottom was again covered with fæces. Both birds fed the young, one bird working upstream, the other downstream, and whilst I watched them the one never transgressed on the other's territory. If the bird arrived with food from upstream, it returned thence. The young were fed mainly on fish, but sometimes on the larvæ of dragon-flies. Both birds made use of a stick near the nesting hole upon which to alight. If the fish brought was crosswise in the beak, it was worked round until it was held lengthwise, when the bird would fly into the tunnel mouth. A few seconds later it would fly out again and land in the water with a splash, submerging its tail-feathers and lower abdomen. It would then fly to a branch on the far side of the stream, and stay there a period ranging from half a minute to four minutes. Whilst on this branch it never faced the one way all the time, but several times changed its position. It generally plunged once or twice into the water from this branch also, almost submerging itself. Only occasionally did the bird fly straight off after coming out of the tunnel and splashing into the water. Once or twice one of them would arrive with a fish held lengthwise in the beak, and when this was the case it did not use the stick but flew straight to the entrance hole, paused, and then disappeared.

However, all the time I watched these two birds, they both, after emerging from the tunnel, alighted with a splash in the stream, and then generally landed on another branch (from which they would plunge into the stream), or occasionally flew straight off. I presume this splashing in the water was to rid the tail-feathers of any fæces that had adhered during the bird's passage up and down the tunnel.

E. W. Hendy, in his "Field-Notes on Nesting Kingfishers" (*antea*, Vol. XIII., pp. 28-29), states that the young were fed "at intervals of ten to fifteen minutes." I found that the number of times the young were fed varied. Thus from 9.45 a.m. to 5.45 p.m. on July 22nd they were fed thirty-three times, the shortest interval between two feedings being one minute and the longest forty-seven minutes. On July 24th from 9.45 a.m. to 5.45 p.m. they were fed fifteen times, the shortest interval between two feedings being four minutes and the longest one hundred minutes. On July 26th from 10.45 a.m. to 4.45 p.m. they were fed seventeen times, the shortest interval being six minutes, and the longest forty-four minutes.

In the afternoon the adult Kingfishers, after feeding the young, would sit on the branch and preen themselves. On one occasion, the male plunged seven times into the stream from this branch.

This year (1923) I discovered that a pair of Kingfishers had excavated their nesting tunnel in the bank of a stream by March 23rd, and noticed a mass of fish bones and scales scattered beneath the entrance hole. On April 8th I put the adult out of the tunnel and again on the 11th. Although the diameter of the entrance hole was no more than 3 inches the bird always came flying out of the tunnel. I did not enlarge this tunnel for fear they might desert, but by means of a torch could see to the end of it. When, however, on April 8th and 11th the adult came out I inferred that the nesting chamber must be to one side of the tunnel.

I was unable to visit the nest again until June 23rd, when, finding the tunnel very dirty with fæces, and droppings outside the entrance hole, I dug in to the nesting chamber. This was on the left side of the tunnel and contained seven fully fledged young. There were several large stones projecting outwards at the end of the tunnel, so perhaps they caused the Kingfishers to dig out the nesting chamber to the side. The young left the nest on June 25th, and were found on the branches of trees by the stream side. Here they remained, being fed by the parents, for a further five days.

From the few hours I had this nest under observation I found that the adults behaved in the same way as already described. After feeding the young, they came flying out of the hole and splashed in the water with their tail-feathers, and then landed on a branch. They also alighted on a branch to alter the position of the fish before flying to the nest. Also, one bird worked upstream, the other downstream, This pair of birds often called out when coming with food, but the pair I observed last year rarely did so. I came across one of the adults two miles below the nesting hole with a fish in its beak, and last year I met one of the adults three quarters of a mile from the nest with food.

The young, when placed at the entrance of the tunnel with their heads towards the nesting chamber, either made no progress towards the chamber, or at the most covered a few inches of ground. One young bird I had hold of repeatedly opened its beak and seized one of my fingers.

Assuming that the bird disturbed from the nesting hole in April was incubating, it would seem that the young ones fledged in June must have been a second brood. On the other hand, the interval is rather short and it is possible that the bird in April had not finished boring the hole and that some delay occurred in the laying of the eggs.

FURTHER OBSERVATIONS ON THE BIRDS OF LUNDY, JUNE AND JULY, 1923.

BY

LEWIS R. W. LOYD.

THE following additions to, and comparisons with my "Observations on the Birds of Lundy, May and June, 1922" (Vol. XVI., p. 148), are from notes made during a stay extending from June 15th to August 4th, 1923. The most noticeable fact is probably the remarkable increase in the numbers of Puffins and Razorbills, and, to a lesser degree, of Kittiwakes and Great Black-backed Gulls. Additions to the 1922 list are marked with an asterisk. Records other than personal are enclosed in square brackets.

RAVEN (*Corvus c. corax*).—Four pairs, as last year. Must be added to the list of those which prey upon the eggs of sea-birds.

HOODED CROW (*C. c. cornix*).—In support of the Rev. F. L. Blathwayt's suggestion (*Zool.*, 1900), that some of this species remain at times on the island and interbreed with *C. c. corone*, it may be mentioned that a bird (apparently of the year) with a light grey breast was seen on June 28th.

*STARLING (*Sturnus v. vulgaris*).—A flock of twelve seen, June 25th.

HOUSE-SPARROW (*Passer d. domesticus*).—Numbers more than doubled.

WHEATEAR (*E. æ. ænanthe*).—One pair only bred in place of four or five.

*[HOOPOE (*Upupa e. epops*).—The Officer in charge of the Coastguards (Mr. Anderson) and all his men concur in affirming that a Hoopoe haunted the ruins of the Castle adjacent to their buildings from mid-March until early May. One was seen in the gardens of the Manor House Hotel on May 2nd and for several days after, sometimes in company of a second (Rev. H. H. Lane, Rector of Lundy). Two pitched close to the South Lighthouse in the early hours of May 10th (wind S.W. 3.C.) and were followed up by a Light-keeper, Robert Hall, who saw five together in the quarries. These, or some of them, were in evidence until May 19th. Hall asserts that their occurrence is annual.]

WOODPECKERS.—In view of a statement made at Exeter in 1909 by Messrs. A. H. Rousham and A. J. Ross, and quoted by me in *British Birds*, Vol. XVI., p. 152, to the effect that all three Woodpeckers had "been established on the Island

at different times," I this year went to some trouble in examining every tree-trunk and post now standing on the Island. Not one of them shows the least sign of ever having been worked on by a Woodpecker, and it may confidently be asserted that no bird of this family has bred on Lundy at any rate within the memory of man.

*WHITE-BREASTED BARN-OWL (*Tyto a. alba*).—A pair appeared in July, 1922, and have since been resident.

[PEREGRINE (*Falco p. peregrinus*).—One pair only bred. The eyasses were again taken and no Peregrine was seen during my stay.]

COMMON BUZZARD (*B. b. buteo*).—Noticeably increased. Four lots of young located.

GANNET (*Sula bassana*).—Single bird seen July 11th, and two July 22nd. Otherwise none seen or recorded.

HERRING-GULL (*Larus argentatus*).—Great numbers of young found dead June 17th *et seq.*, presumably killed by cold "snap."

BRITISH LESSER BLACK-BACKED GULL (*L. fuscus affinis*).—The N.E. colony has decreased by 80 per cent., but a new colony established on the west cliffs fully makes up for this desertion.

GREAT BLACK-BACKED GULL (*L. marinus*).—Increased by at least 50 per cent. Sixteen nests located, whereas last year only about twelve pairs bred.

KITTIWAKE (*Rissa t. tridactyla*).—Considerably increased. Several new colonies formed and others much enlarged.

RAZORBILL (*Alca torda*).—Increased in a remarkable manner. Their numbers must be nearly doubled since last season.

SOUTHERN GUILLEMOT (*Uria aalge albionis*).—No noticeable change in numbers. A new colony of about thirty-five pairs formed N.E.

BRITISH PUFFIN (*Fratercula arctica grabæ*).—Like the Razorbill have probably doubled their numbers since 1922.

PHEASANT (*Phasianus colchicus*).—Appears to be successfully established.

NOTES ON SOME BIRDS OF THE SWISS NATIONAL PARK.

BY

W. H. THORPE, M.B.O.U.

THE Swiss National Park is situated in the extreme south-east of Graubünden. It is roughly 56 sq. miles in area and is of irregular outline, stretching from near Scans to the neighbourhood of Schuls in the Lower Engadine, its southern boundary coinciding for a considerable distance with the Swiss-Italian frontier. Thus situated, the Park includes some of the wildest and most sparsely populated country in the whole of Switzerland and is therefore of great interest to the naturalist. All wild life is very strictly protected, the object of the Park Committee being to preserve the indigenous fauna and flora under absolutely natural conditions; and although only comparatively recently established—the first reservation was made in 1908—there is already a marked increase in the plant and animal life of the district; the large numbers of Chamois and the quantity of bird life being especially noticeable.

I was fortunate enough to be able to spend a short time in the Park this summer under the guidance of Professor Zschokke of Basel University, and the following notes deal with some of the birds to be observed in the district. They are mainly the result of personal observation in the Engadine in 1923 and in other parts of Switzerland in 1921 and 1922.

Perhaps the most typical bird of the Swiss coniferous forests is the Thick-billed Nutcracker (*Nucifraga c. caryocatactes*). It is found in suitable localities throughout the Swiss Alps, being most plentiful where the forests consist mainly of the Arolla Pine (*Pinus cembra*), the seeds of which form its chief article of food. It may frequently be seen, perched generally on the top of some favourite tree, busy extracting the seeds from a cone, and there is little doubt that it thus plays an important part in extending the range of the Arolla Pine; this effect being well shown, as Dr. S. Brunies remarks,* by the distribution of the tree in scattered clumps in some of the valleys of the National Park. The chocolate and white plumage and the white-tipped tail feathers make identification very easy, and the harsh and high-pitched "Gurrrrr" is one of the most frequent sounds of the Swiss forests. I

* Le Parc National Suisse. Benno Schwabe et Cie, Bâle.

have also several times heard the peculiar note so effectively described by Howard Saunders as "like a sprung rattle."*

Among the Corvidæ must also be mentioned the Alpine Chough (*Pyrrhocorax graculus*) which is generally common above the tree line. I have never observed it lower than 7,000 ft. ; but in the day time the flocks tend to go up higher, and I have seen them well over 13,000 ft. They feed largely on the snail *Helicigona arbustorum* which is found nearly up



SWISS NATIONAL PARK : PIZ QUATER VALS AND VAL SASSA.

(Photographed by W. H. Thorpe.)

to the snow line, but where there are high chalets or Alpine huts they may be frequently seen searching for scraps, and they will eagerly seize any piece of food thrown down on the snow. They are easily distinguished from the Chough (*P. pyrrhocorax*), which is much rarer, by the shorter yellow bill and small size.

Among the smaller Passerine birds the Common Crossbill (*Loxia c. curvirostra*) is found, small parties being frequently

* *Ibis*, 1891, p. 174.

seen moving through the forests of the Park keeping up a continuous chatter as they go, attracting attention by their peculiar actions and varied plumages.

The Snowfinch (*Montifringilla n. nivalis*) occurs throughout the Park in suitable places, and parties are to be seen in late summer and autumn generally near the snow line, the contrasting black and cream of the plumage making them very noticeable in flight. Of the Buntings the Rock Bunting (*Emberiza cia*) may be mentioned. It seems to be fairly local in distribution and I have only met with it on two or three occasions, always among trees and shrubs a little way below the tree line, though S. B. Wilson* mentions it as occurring on the "lower meadow lands," and Fatio speaks of it as being found up to about 4,000 ft.

The Meadow-Pipit (*Anthus pratensis*) and the Water-Pipit (*A. s. spinoletta*) are both found up to 9,000 ft.; that is, well above the tree line, which is about 7,000 ft. The latter can be distinguished by its larger size, longer tail, lack of greenish tinge on the back and whiter eye stripe, and seems fonder of perching on trees than *A. pratensis*. It shows, perhaps, a preference for stream sides, though it by no means restricts itself to them.

The Wall-Creeper (*Tichodroma muraria*) is now very rare in the greater part of Switzerland although it was common twenty or thirty years ago in parts of Graubünden. It is still found, however, in the National Park, but unfortunately seems to be on the decrease in spite of rigid protection, the cause of its diminution being unknown.

Among the Tits the most interesting to the British ornithologist is the Crested Tit (*Parus cristatus mitratus*). This bird is very common in the pine and larch forests of the Park and is frequently seen in company with other Tits, especially Great and Coal Tits (*P. m. major* and *P. a. ater*) as well as with the Golden-crested Wren (*Regulus r. regulus*) and the Tree-Creeper (*Certhia familiaris macrodactyla*).

In the high treeless valleys the Wheatear (*Enanthe æ. ænanthe*) is common and apparently takes advantage of the enormous number of grasshoppers to be found in such localities, as I have watched a bird taking short flights from the ground twisting and turning very dexterously in the attempt to catch them. As far as I have been able to ascertain this is an hitherto unrecorded article of diet for the species, although, from the truly prodigious number of grasshoppers

* *Ibis*, 1887, p. 131.

occurring in many parts of the Alps one would think that it must be a frequent one.

The Black Redstart (*Phœnicurus ochrurus gibraltariensis*) is another common inhabitant of these upland valleys, but it does not seem to go to quite as great an altitude as the Wheat-eat. The handsome black-breasted male is a very conspicu-



SWISS NATIONAL PARK: VAL CLUOZA AND PIZ DEL DIAVEL.

(Photographed by W. H. Thorpe.)

ous bird, the females and juveniles with their delicate brown-grey upper parts being equally beautiful though less striking. Where châteaux are available they generally seem to choose them for nesting purposes and in late July and early August are to be seen continually flying to and fro to their nests in the crannies in the walls or under the eaves, every now and

then stopping to utter their short characteristic song from some favourite stone on the roof.

The Alpine Accentor (*Prunella c. collaris*) is to be found on bare rocks and screes not far below the snow line, though it is easily overlooked owing to its unobtrusive habits and harmonization with its surroundings.

Of the birds of prey the Lammergeier (*Gypaëtus barbatus*) has long been extinct as a breeding bird in Switzerland, though it was reported many times between 1890 and 1900 in the district in which the National Park has since been established.

The chief bird of prey now to be found in the Park is the Golden Eagle (*Aquila c. chrysaëtus*). This bird, though rare in the greater part of Switzerland, is more frequent in Graubünden, especially in the region of the National Park, there being several eyries within the boundaries of the Park. While there I had the great good fortune to see nine Eagles in the air at the same moment, a truly magnificent sight, showing the rapid effect of strict protection.

The eyries in the Park are all, according to Brunies, situated between six and seven thousand feet up, the bird itself, however, being a species characteristic of the highest region. One eyrie of which I had a close view was situated on an overhung ledge on the face of a cliff at an altitude of about 6,300 ft., although one could approach within a short distance of it along a ledge on a level with the nest but separated from it by a cleft. Another eyrie was seen at about the same height.

Of the other birds of prey of the Park may be mentioned the Common Buzzard (*Buteo b. buteo*), frequent in the wilder parts of Switzerland; and the Goshawk (*Accipiter g. gentilis*). The latter I have only met with on two or three occasions.

The Eagle Owl (*Bubo b. bubo*), now very rare in Switzerland, still breeds in some parts of the Park although I did not have the good luck to see it.

Finally, among the Game birds, the effect of protection is already very marked. The Capercaillie (*Tetrao urogallus*) which was formerly very rare in the district is now reported to be steadily on the increase, while Ptarmigan (*Lagopus mutus*) are very plentiful on suitable ground at an altitude of about 7,500 to 8,500 ft. The Hazel Grouse (*Tetrastes bonasia*) generally considered a bird of the lower forests—Dresser says up to 3,000 ft. in the Caucasus—occurs in the Park as high as 6,000 ft.

NOTES

LATE NESTING OF GREY WAGTAIL.

ON August 7th, 1923, at Lee, in north Devon, I noticed a pair of Grey Wagtails (*Motacilla c. cinerea*) feeding young which had obviously only vacated the nest a few days previously. This would appear to be an unusually late date for the breeding of this species. HOWARD BENTHAM.

FIRE-CREST IN SURREY.

ON October 21st, 1923, after a stormy night, a Fire-crest (*Regulus ignicapillus*) appeared in my garden at Tadworth. It was first noticed fluttering in a confused way along the fence-wires close to the house, and a moment later it struck the glass of one of the windows, but recovering itself, alighted on some rustic-work, where it remained long enough for me to carefully note the details of its plumage. The distinctive markings of the head and cheeks, as well as the light under-parts and very green colour of the back, left no doubt in my mind as to the bird's identity. HOWARD BENTHAM.

GREAT GREY SHRIKE IN SURREY.

ON December 18th, 1922, Mr. Skilton, of Walton-on-the-Hill, brought for my inspection a Great Grey Shrike (*Lanius c. excubitor*) which had been captured in a fruit net near that place a few days previously. The bird showed only one white wing-bar, and judging from its very greyish under-parts I assumed it was a female. HOWARD BENTHAM.

HEBRIDEAN SONG-THRUSH ON MIGRATION IN AYRSHIRE.

ON October 28th, 1919, I observed at quite close quarters in the parish of Fenwick, north Ayrshire, a dark Song-Thrush (*Turdus philomelos*) and recorded it in my diary as "thought to have been of the Hebridean race." Since this date I have seen every year what I take to be small dark Thrushes in company with Redwings (*T. musicus*), usually in October when the latter first arrive. The year 1922 was an exceptionally good one for observing the October migration. October 6th and 7th were perfect cloudless days with little wind (N.E.). In the afternoon of the 6th I observed over

a hundred Redwings come into a young pine-wood with five Bramblings, and later dozens more Redwings (and possibly Thrushes) went over. On the 7th I went out with a gun and found the Redwings in parties of fifty or so in the covers, shooting one immature Redwing and one of the dark Thrushes. There were to my knowledge five or six more of the latter. On the 8th and 9th the birds were in droves in all the covers including some more dark Thrushes. This year (1923) has been very bad for migration, no N. or E. winds, and I did not see any Redwings until October 15th, when there were no Thrushes with them. E. RICHMOND PATON.

[Mr. Paton has kindly sent up the bird that he shot on October 7th, 1922, for examination. It is a male and undoubtedly belongs to the Hebridean race (*T. ph. hebridensis*). It can be picked out at once from a large series of British and Continental birds, both by the more intense blackness of the spots on the under-side and by its darker brown wing-feathers, tail and back. This appears to be the first time that this race has been recognised as a migrant, and Mr. Paton's observations suggest that the Redwings coming south by the west coast route "pick up" a proportion of the Hebridean Song-Thrushes, which accompany them to their winter quarters.—N.F.T.]

LATE STAY OF SWIFT IN SCOTLAND.

ON November 12th, 1923, I saw a pair of Swifts (*Apus a. apus*) at Aviemore, Inverness-shire; the weather was mild, but for the previous ten days frost and snow had been experienced, as much as 14 degrees of frost having been registered. The Swifts were watched for a quarter of an hour, hawking for flies close above the leafless birches.

Is this a record date for Swifts to be observed in Scotland? The last Swifts observed here were on October 1st, and even this date is very late for Swifts to be seen in Scotland.

AUDREY GORDON.

[There are two later records for Scotland, viz. :—Linlithgow, November 13th, 1917, and Clackmannan, November 14th, 1914.—EDS.]

CUCKOO'S EGG IN CHAFFINCH'S NEST.

ON May 13th, 1923, the egg of a Cuckoo (*Cuculus c. canorus*) was found in the nest of a Chaffinch (*Fringilla c. cælebs*) in a hedge bordering New College cricket ground, at Oxford.

The nest was found in the first instance by P. J. King, the son of the groundsman, by whom it was shown to me. It was built in a small cypress forming part of a hedge on the south side of the ground and on the above date contained three eggs of the fosterer and one of the Cuckoo. The latter is of the common "Pied Wagtail" type and was doubtless the product of a Cuckoo ordinarily parasitic on Wagtails or Hedge-Sparrows.

I understand from the Rev. F. C. R. Jourdain that about ten previous instances of the Chaffinch as fosterer (in the British Islands) are known to him.

B. W. TUCKER.

SCAUP-DUCK AND GADWALL IN LONDON.

ON November 4th and 5th, 1923, I saw a Gadwall (*Anas strepera*) drake and two Scaup-duck (*Nyroca m. marila*) on the Round Pond in Kensington Gardens. I had never seen an unpinioned Gadwall in London before, though there have long been pinioned birds on the lake in St. James's Park. I have never in over twenty years' experience seen Scaup, pinioned or unpinioned, on any of the London park waters. Harting, in his *Birds of Middlesex* (1866), says he knew of only one case of the Gadwall occurring in the county and two cases of the Scaup. One of the park-keepers told me that the Gadwall has been on the pond for two years, but that the Scaup, which he had never seen there before, arrived only a short time ago. There are no pinioned birds on this pond. All the other ducks on the pond, so far as I could see, were Mallard, except one Tufted drake and on November 4th (I could not find it on the 5th), one Pochard drake.

W. M. CROOK.

PROBABLE FERRUGINOUS DUCK IN FLINTSHIRE.

A Duck that has been on the pond at Gyrn Castle, Flintshire, since about October 11th, 1923, has puzzled me for some time. It is fairly tame and frequent examination through glasses at 30 to 50 yards' range and comparison with bird book descriptions proves it to be without doubt a Ferruginous Duck (*Nyroca nyroca*). I believe it to be an adult female. I watched it this morning (October 15th) preening itself, which enabled me to see its white under-parts, which do not show when swimming, its dark bluish legs and feet, the white secondary feathers and an occasional white flash about its eyes as it turned its head. Swimming on the water its eyes look black and show no noticeable white. Its head and neck

are dark chestnut and I cannot see any white under the chin which is referred to in some descriptions.

It seems to feed on insects and tops of weeds on the surface. I have only seen it dive once and then it was alarmed. The pond and wood round it has been a sanctuary for many years and is the home of many wild Mallard, which all flight at dusk to the Dee estuary, returning at dawn.

I notice too to-day another visitor not often on the pond—a female Shoveler. F. A. BATES.

[The female Ferruginous Duck has brown irides.—EDS.]

WHITE EGG OF OYSTERCATCHER.

THE accompanying photograph showing a pure white egg in the clutch of an Oystercatcher (*Hæmatopus o. ostralegus*) was taken by me at Sark on June 27th, 1923. I have never come across such outstanding variation in the case of the Oyster-



catcher and I think it must be quite exceptional. The white egg hatched a day in advance of the other two, and, as will be seen, the chick was in the act of hatching when I took the photograph. L. J. TURTLE.

SHAG INLAND IN SOMERSET.

ON September 1st, 1923, a Shag (*Phalacrocorax a. aristotelis*) pitched in a cottage garden at Chewton Mendip, North Somerset, and, being presumably in a more or less exhausted state, was captured and came into my possession. It is a bird of the year, in good condition. Chewton Mendip is sixteen and a half miles in a direct line from the nearest point of the North Somerset coast (where, however, the species is of very rare and, in fact, hardly more than accidental occurrence) and forty-one miles from the nearest point of the coast of Dorset. In view of the infrequency of the occurrence of this species inland it may be worth mentioning that two previous unpublished records for the county are known to me; one was picked up exhausted in October, 1906, at Shepton Mallet, where it is preserved, and was subsequently examined by the late Dr. J. Wiglesworth and Mr. Stanley Lewis; and another, as Dr. Hartert informs me, was seen fishing in the Avon by Lord Rothschild and himself for three successive days in September, 1918. A third occurrence, at Winscombe, was recorded by Dr. Wiglesworth (Vol. X., p. 188).

B. W. TUCKER.

SPOTTED REDSHANK IN SHROPSHIRE.

ON September 21st, 1923, Mr. Brownlow R. C. Tower sent in for examination and preservation a Spotted Redshank (*Tringa erythropus*) which had been shot at Ellesmere. It was a male and, from the white eye-stripe and other details of plumage, appeared to be a bird of last year. This is a new record for Shropshire, though one of the examples recorded in my *Vert. Fauna N. Wales* was obtained at Overton in Flintshire, which is quite close to Ellesmere.

H. E. FORREST.

AVOCETS IN NORTH KENT.

IN *British Birds* (Vol. XVI., p. 193) I recorded the occurrence of an Avocet (*Recurvirostra avosetta*) on Yantlet, Kent. In the collection of Mr. F. W. Herrtage, which I have been permitted to inspect, there is another which was also obtained there in November, 1908.

I now find that both these birds were wrongly recorded in the *Field* (November 14th, 1908), as having been obtained in Essex and consequently these occurrences have been referred to this county by the authors of *A Geographical Bibliography of British Ornithology*. Both these records are referable to Kent. The mistake, no doubt, arose from the fact that Messrs. Cooper & Herrtage, who obtained them, had their headquarters at Leigh-on-Sea, Essex.

WILLIAM E. GLEGG.

LARGE CLUTCHES OF CURLEWS' EGGS.

ON April 29th, 1923, I found on the Derbyshire moors the nest of a Curlew (*Numenius a. arquata*) containing six eggs. It was situated amongst long heather with no "run" to it and the birds would have had to fly directly on to the nest. The eggs appear to be the produce of two birds.

C. B. CHAMBERS.

On reading the notes on this subject (*antea*, p. 146) we were reminded of a nest which we found at Loch Leven on May 22nd, 1909. We had found a good many Curlews' nests that day, but this one containing five eggs, four of the normal size and



one slightly smaller, struck us as being so unusual that we photographed it. The difference in the size of the eggs does not show very much in the photograph but was quite apparent when looking at the nest.

EVELYN V. BAXTER.

LEONORA JEFFREY RINTOUL.



LETTERS



BIRDS REMOVING NESTING MATERIAL TO ANOTHER SITE.

To the Editors of BRITISH BIRDS.

SIRS,—In reply to Mr. Blathwayt's letter (*antea*, p. 148) I would like to point out that in Vol. XV., p. 184, I chronicle the same behaviour with Reed-Warblers (*Acrocephalus s. scirpaceus*). In almost every instance where Reed-Warblers have their first nest destroyed it has been my experience to find that the second or rebuilt nest is constructed with the material from the first and usually but a few feet distant. By such means at least some time and labour is saved in not having to hunt for new nesting material.

GEO. J. SCHOLEY.

SIRS,—With reference to Mr. Blathwayt's letter, I recollect an instance a few years ago when the eggs of a Raven (*Corvus c. corax*) had been taken near Tintagel in Cornwall, the birds immediately commenced to pull the nest down and reconstruct it from the same materials on the opposite side of the cove.

CLIFFORD BORRER.

NEST MATERIALS OF PIED FLYCATCHER.

To the Editors of BRITISH BIRDS.

SIRS,—In May, 1922, a supposed nest of the Pied Flycatcher (*Muscicapa h. hypoleuca*) with five eggs was found at an old decoy pool near Cheddar, Somerset, by a lad who described the bird seen at the nest fairly well as of this species. This nest and one egg were submitted to a well known authority for verification if possible, with the result that the egg was described as typical but that he had never known any feathers present in the materials employed by the Pied Flycatcher, but which were present in the nest sent; bark strips were characteristic and also present. Would any reader obligingly state if he has ever found feathers employed? In the *Prac. Handbook* it is stated (p. 291) that sometimes feathers are used.

STANLEY LEWIS.

October 23rd, 1923.

[It would in our opinion be a dangerous proceeding to base a record of the breeding of the Pied Flycatcher in Somerset on the above circumstances without better evidence of the identity of the birds.—EDS.].

CUCKOO LAYING TWICE IN THE SAME NEST.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. E. P. Butterfield's letter (*antea*, p. 148), reminds me of a similar occurrence in 1922, where a " Hedge-Sparrow " Cuckoo under my close observation deposited two eggs in the same nest, and as in Mr. Butterfield's case this particular occurrence was disputed at the time. The doubt expressed in some quarters caused me to make such investigations as compelled me to believe that a " wandering " Cuckoo had several times visited this nest *after the laying of the first egg by the " dominating " Cuckoo*, which to my mind would have been sufficient to cause the " dominating " bird to lose her head!

GEO. J. SCHOLEY.

THE BREEDING OF RACING PIGEONS.

To the Editors of BRITISH BIRDS.

SIRS,—I have read with great interest Dr. B. B. Riviere's article in your last number on "Homing Pigeons and Pigeon-Racing," but I do not understand the author's statements, on page 119, concerning the breeding of Racing Pigeons.

He first reminds us that the Homing Pigeon is "a domesticated form of the Rock-Pigeon (*Columba livia*)."
In his next paragraph he states that "long distance" birds can not be bred "from Pigeons which for generations have only flown in short races (100-200 miles)" but only from a strain of birds accustomed to fly long distances (400-600 miles). In his last paragraph on breeding he states that, through selection, Pigeons can nowadays fly 500 miles in a day as compared with a flight of 300 miles in a day accomplished by their ancestors forty years ago.

Now if through "the long and severe process of selection" the flight of a strain of Pigeons can be increased by 200 miles, then what is to hinder one, using the same methods of selection, breeding birds capable of flying in the long-distance races from a strain of short-distance birds?

R. H. BROWN.

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS, which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND.

TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.

F. H. L. WHISH,
LYMPHAM, SOMERSET.



The Food of Some British Wild Birds

A Study in Economic Ornithology.

By WALTER E. COLLINGE, D.Sc., F.L.S., M.B.O.U.

Keeper of the Yorkshire Museum, York.

A new, revised, and illustrated edition of this work will be issued shortly to subscribers in 8 or 9 parts, price 6s. 3d. each (post free). The MS. will be placed in the printer's hands as soon as 150 subscribers are secured. Orders to be forwarded to the Author.

W. & A. K. JOHNSTON'S TRACKS OF BRITISH BIRDS CHART

Edited by H. MORTIMER BATTEN, F.Z.S.

The issue of this chart is an event of great interest to the large number of schools which now undertake Nature Study, to all Boy Scout and Girl Guide Organisations, and indeed, to everyone interested in Natural History throughout the land. The Tracks are drawn life-size, and printed in black and blue so as to assist the work of identification.

Price 4s. net each (Postage 4d. extra) From your Bookseller, or direct from the Publishers.

W & A K JOHNSTON



EDINA WORKS, EASTER ROAD, EDINBURGH.

The Oologists' Record.

A QUARTERLY MAGAZINE DEVOTED TO THE ADVANCEMENT OF OOLOGY IN ALL PARTS OF THE WORLD.

Vol. III. Now Current. 1st Volume 1920.

Vols. I. and II. can still be had.

Subscription 5s. per annum, post free to all parts of the World.

Is contributed to by the World's Leading Oologists and
Is the only Magazine devoted exclusively to Oology.

Published by Harrison & Sons, Ltd., 45, St. Martin's Lane, London, W.C.2

Editor: Kenneth L. Skinner, Brooklands Estate Office, Weybridge, Surrey

FOR SALE.

ARCTIC BIRDS' SKINS,
MAMMALS,
SKULLS AND EGGS.

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22.

Full particulars on application.

G. DINESEN, Dannebrogsgade 8, Copenhagen, B. DENMARK

and Room.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

JAN. 1.
1924.

Vol. XVII.
No. 8.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

"The kind of Nature Magazine we have wanted for some time."—

Westminster Gazette.

"We wish Dr. Renshaw every success."—*The Ibis.*

Write to-day for Illustrated Prospectus from the Editor, c/o

SHERRATT & HUGHES, 34, Cross Street, Manchester
DO IT NOW.

NATURALISTS, PRIVATE COLLECTORS, &c.

Interested in the Birds, Birds' Eggs and Mammals of the
ALPS OF SWITZERLAND AND OF SPAIN, should send
particulars of their requirements to:—

E. FLÜKIGER,

Collector and Naturalist,

INTERLAKEN, SWITZERLAND.

CORRESPONDENCE INVITED.

NOW READY.

THE BIOLOGY OF BIRDS

BY

Professor J. ARTHUR THOMSON.

A new and comprehensive volume by this well-known
natural history writer, whose work on various aspects
of bird life has attracted such widespread attention.

Fully Illustrated.

16/- net.

The New Statesman says:—"The Biology of Birds' is not
merely one of those books which are to be recommended,
as pleasant and instructive reading, to those interested in natural
history and outdoor life. It is indispensable to them."

SIDGWICK & JACKSON LTD., 3 Adam St., London, W.C.2

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."
EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 8, VOL. XVII., JANUARY 1, 1924.

	PAGE
The Early History of the Mute Swan in England. By N. F. Ticehurst, M.A., F.R.C.S., ENG.	174
Some Breeding Habits of the Swallow and House-Martin. By R. H. Brown	183
Notes :—	
Snow-Bunting in Warwickshire (Miss B. A. Carter) ...	185
Notes on the Breeding of the Marsh-Warbler in Berkshire (A. Steven Corbet)	185
The Nestling Marsh-Warbler (J. A. Walpole Bond) ...	185
Yellow-browed Warblers in Lincolnshire (G. H. Caton-Haigh) ...	186
Two Unusual Blackbirds' Nests (Masa U. Hachisuka) ...	186
Remarkable Nesting-Site of Sand-Martin (P. F. Bunyard) ...	187
Large Clutch of Peregrine Falcon's Eggs (E. Richmond Paton) ...	188
Sheld-ducks, Shag and Manx Shearwater in Warwickshire (Miss B. A. Carter)	188
Probable Ferruginous Duck in Somerset (Stanley Lewis) ...	188
Sandwich Terns in Norfolk and the Normal Clutch of Eggs (Clifford Borrer)	189
Short Notes :—	
British Blue-Tit in Alderney. Great Spotted Woodpecker Breeding in Forfarshire. Hoopoes in Scotland. Little Owl Breeding in Yorkshire. Turtle-Dove in Banffshire. Scandinavian Lesser Black-backed Gulls at Isle of May. Disappearance of Yorkshire Nesting Colony of British Lesser Black-backed Gulls. Common Crane Fossil in Yorkshire	190
Letters :—	
Birds removing Nesting Material to another site (Major W. M. Congreve and Stanley Lewis)	192
New Materials of Pied Flycatcher (P. F. Bunyard) ...	192
Gadwall in London (G. C. Low, M.D.)	193
Large Clutches of Eggs (P. F. Bunyard)	193
Reviews :—	
<i>Notes on the Birds of Dumfriesshire, a continuation of the Birds of Dumfriesshire.</i> By Hugh S. Gladstone	194
<i>Report on Scottish Ornithology in 1922, including Migration.</i> By Evelyn V. Baxter and Leonora J. Rintoul	195
<i>A Chronological List of British Birds.</i> By H. Kirke Swann ...	196

THE EARLY HISTORY OF THE MUTE SWAN IN ENGLAND.

BY

N. F. TICEHURST, M.A., F.R.C.S., ENG.

THE earliest particulars of the history of the Mute Swan in England hitherto known are contained in the statements by Saunders (Yarrell's *Brit. Birds*, IV., p. 327) that "Swans, it is said, were first brought into England from Cyprus by Richard I., who began his reign in 1189; and they are particularly mentioned in a manuscript of the time of Edward I. (1272)." These naturally have been extensively copied (not always correctly) and appear in many books on British birds. Thus, Gurney (*Early Annals of Ornithology*, p. 57) writes "Mr. H. Saunders states that tame Swans are particularly mentioned in a manuscript of 1272, which I have not seen. The passage referred to, as I learn from Mr. Harting who was Saunders' informant, is to be found in the Wardrobe Accounts of Edward I., published by the Society of Antiquaries." As a matter of fact, these Wardrobe Accounts are those for the twenty-first year of Edward I., 1299-1300, so that we may say that the earliest documentary evidence of the existence of the Mute Swan in England so far brought to light belongs to the last year of the thirteenth century.

The authority for the statement that it was brought into England by Richard I. from Cyprus, presumably about 1192 at the termination of the third Crusade, would appear to have been known to Newton, as he designates it (*Orn. Dict.*, p. 930) as "uncertain," but hitherto it has evaded my search. It will, I think, be clear however from what follows that the statement itself is so uncertain that it should be allowed to disappear from the literature of the subject.

Taking 1300, therefore, as our starting point we will endeavour to show what is to be learnt of Swan-history from certain national and other manuscripts, which take us back to the last twenty years of the twelfth century. None of these sources of information would appear to have been previously searched in this connection and only sporadically with regard to other species.

On June 29th, 1295, a commission was issued to A. de Crokdayk and W. Inge on the complaint of Robert de Tate-shale, touching the persons who, while he was on the King's service in Wales, entered his free warren at Malteby by Strubby, co. Lincoln, hunted therein and carried away hares and at Wyme carried away forty swans. (*Cal. Rot. Pat.*)

Amongst the Pleas at London in the Middlesex Iter XXII. Edward I. (1291-2) one A. brought a writ of Trespass against B. in respect of thirty swans, which he had taken by force. (*Year Book 22 Ed. I.*, p. 588.)

On August 11th, 1283, a commission was issued to Richard Pevenese and Nicholas le Gros touching the persons who carried away swans of Giles de Ivenles at Wertlinge, co. Sussex, during his absence on the King's service and under his protection in Wales. (*Cal. Rot. Pat.*)

On August 20th, 1282, a commission was issued to Solomon de Roff' and John de Sandwyco touching the persons who came by night to the water of la Rivere, co. Kent, and carried away eight swans of Stephen de Penecestre and assaulted Roger le Swonhirde his man (*Cal. Rot. Pat.*). This seems to be the earliest mention of the office of swanherd.

On November 16th, 1276, a commission was issued to Richard de Holebrok touching the persons who by night took two brood swans and four cygnets of William de Saham at Be. . . . , co. Norfolk, removed the mark of the said William with which the said swans had been marked and extracted the chief quills from their wings and still detain the cygnets (*Cal. Rot. Pat.*). This is the earliest mention of the use of swan-marks.

On January 11th, 1276, the King issued an order to John Russel, bailiff of Clarendon, co. Wilts, to deliver to the sheriff of Winchester fifteen swans from the King's swans in his custody, to be carried to the King at Winchester; also an order to the sheriff of Winchester to receive them and cause them to be carried to Winchester (*Cal. Rot. Claus.*). This is the earliest mention of the royal game of Swans that was maintained for many years on the river Avon in connection with the royal manor of Clarendon, and concerning which there are several entries in the Patent Rolls of Edward III.

In the Close Rolls for 4 Edward I. is entered a memorandum of agreement dated the Wednesday after St. Katherine (November 25th, 1275) between Lady Eleanor de Verdun and Sir Theobald de Verdun concerning her dower, to the effect that he has granted to her as dower certain manors in Warwickshire and Leicester, with all oxen, etc., on certain of them, excepting the swans, the foals of the stud and the swine of the manors, driven away or slain before the making of the agreement, on condition that she answer to him for as much money as he acquired them for from the executors of Sir John, her late husband.

In 1274 Swans were a sufficiently common article of food amongst the upper classes of the City of London as to make

their appearance on the stalls of the Poulterers, so that we find them included in the orders that were issued in that year fixing the prices at which they and other commodities were to be sold. A translation of the heading of these orders reads "In the time of Henry le Waleys, mayor of London, Nicholas of Winchester and Henry of Coventry, sheriffs, was made by command of the King and with the assent and consent of the nobles of the kingdom and the citizens of the aforesaid city, the *Statuta Poletriciæ*." By these the price of a swan was fixed at 3s. (*et unum Cygnum pro iij solidis*). (Letter Book C. of the City of London.)

In 1256 a commission was issued to Reynold de Cobham and Alvred de Dene to enquire as to the persons who stole the crops and swans of Bertram de Crioll in divers places in the county of Kent, while he was Constable of Dover, and to do justice on such as they found guilty therein. (*Cal. Rot. Pat.*)

Between 1247 and 1251 Henry III. issued many requisitions (entered in the Close Rolls) for provisions to the sheriffs of the different counties of those parts of England, where he happened to be going to keep the chief feasts of the year. These requisitions, though they contain promises of payment, were issued in the most peremptory terms, *e.g.*, in 1247 the sheriff of Hampshire was ordered as he valued his body (*sicut corpus suum diligit*) to deliver at the castle of Winchester on the Sunday or at latest the Monday before Christmas (amongst other things) six Swans. In the same terms the sheriff of Somerset and Dorset was bidden to provide twelve, the sheriff of Oxford and Berkshire ten, the sheriff of Wiltshire six and William Passelewe six.

Twenty-two Swans, amongst other things, had to be provided for the feast of St. Edward (March 18th) 1249, and the sheriffs of Essex and Hertfordshire, Surrey and Sussex, and Kent were commanded "as they valued themselves and all their belongings" to buy six apiece in their bailiwicks, and the sheriff of Middlesex four, and to deliver them at Westminster on the vigil of the feast at the latest. In June of the same year further requisitions were sent out to the sheriffs of most of the southern and eastern counties for similar quantities and kinds of provisions, to be held ready for when the King should send for them, and Swans were included to the number of eighty-two.

The largest requisition during this period was one sent out from Windsor on October 28th, 1251, to the sheriffs of Yorkshire, Lincolnshire, Northumberland, Cumberland and Lancashire, for the provisioning of the court at Christmas, which

was to be spent at York. The enormous amount of food to be provided on this occasion included no less than 125 Swans, of which even the Bailiff of Lincoln and the Mayor and Bailiffs of York had to provide ten each. Four other requisitions of a similar kind were issued during this same year.

In addition to these, letters were several times sent, couched in less peremptory terms, to the heads of the great Fenland religious houses "requesting" them to supply the King with certain wild-fowl and Swans. Thus, in the same year, the Abbots of Thorney, Croyland, Ramsey and Peterborough and the Prior of Spalding were asked to send Swans, Cranes and other wild-fowl for the Feast of St. Edward; and on June 6th, 1249, the Abbots of Peterborough, Thorney and Ramsey, and the Priors of St. Neots, Barnwell, Spalding and Ely were requested to supply as many Swans, Herons, Bitterns and Cranes as they could get.

Within the same period, namely in 1250, the See of Winchester fell vacant and the King at once seized the opportunity and commissioned one, Peter Chacepore, to collect to the King's use, throughout the Bishopric, as many kids, rabbits, Swans, Cranes, Pheasants, Partridges and other wild-fowl as he could get.

By ancient custom the Swan has long enjoyed a unique position amongst domestic and semi-domestic animals, in that the ownership of the brood does not follow, as with others, the ownership of the dam, but belongs equally to the owners of the parents, if they be different. An order entered in the Close Rolls of 1246 is particularly interesting in this connection, as showing that at that date the custom was as yet hardly established on a sure basis. Incidentally it infers that Swans were marked at this date, though there is no mention of the fact. The order was issued by Henry III. from Windsor on September 25th to the Sergeant of Kennington, that of the seven Swans that he had seized out of the brood of the King's Swan and the Swan of the Hospital of Hampton, he should keep four to the King's use and restore three to the Master of the Hospital, until it should be argued in the King's Court, whether the brood was the King's or the Hospital's, or whether it belonged equally to both.

On December 4th, 1242, a requisition was issued to William de Bocles to procure for the King's use, twenty or more Cranes and as many Swans and other wild-fowl as he could and to deliver them on the third or fourth day before Christmas. (*Cal. Rot. Claus.*)

About this period (1235-1259) Henry de Bracton wrote his famous treatise *De legibus et consuetudinibus Angliæ*, in which he laid down, amongst other things, the status of wild animals as regards ownership, and in which the keeping of Swans in a domesticated or semi-domesticated state is specifically referred to. After discussing the method and limitations of the ownership of wild animals, he goes on (Translation, edited by Twiss, 1878), "If wild animals have been tamed and they by habit go out and return, fly away and fly back, such as deer, swans, sea-fowls and doves and such like, another rule has been approved, that they are so long considered ours, as long as they have the disposition to return; for if they have no disposition to return they cease to be ours."

The earliest mention of the Swan in the Close Rolls occurs in an order, dated November 4th, 1231, to the Constable of Marlborough to the effect that Ralph Briton is to have two brood Swans (*duos cignos aerrarios*) by gift of the King. A reference a year earlier is to be found in the Charter Rolls, wherein is enrolled an allowance, dated April 20th, 1230, to Roger le Duc, citizen of London, of an agreement between John, son of Robert, and the said Roger, whereby Roger or his assigns were to hold the manor of Evre, co. Bucks., except the mills and the Swans, of the said John for a term of five years from the quinzaine of Easter, 14 Henry III.

The Calendars of the Patent, Charter and Close Rolls go back to 1216, 1226 and 1227 respectively, but contain no earlier references than those cited. From these it will be seen that not only were royal games of Swans maintained on the Thames, on the Avon and on the Kennet by Henry III., but that certainly before the middle of the thirteenth century they were kept by many of the great religious houses and inferentially by many commoners, amongst whom their possession was reckoned a considerable asset, while even a single pair was deemed of sufficient value to form a royal gift. In addition, Swans were evidently by this date very generally distributed throughout England (except perhaps in the western midlands and extreme south-west, about which there is no information), several of the ancient customs with regard to their keeping were already in use or in process of evolution and they were to be obtained for food in very considerable numbers.

Prior to 1230 there are so far two pieces of evidence to bring forward, in the first of which, owing to what appears to be a slip on the part of a seventeenth century translator, there is a little doubt as to the exact date. It is contained

in a deed dated September 6th, 1398, of which a translation, dated 1618, is given in *The Cockersand Chartulary* (Chetham Society Publication, Vol. 57). It is endorsed (presumably by the translator) "A coppie of a deed from K. Jo. confirmed by K. Ric. the 2 freeing all the launds of Cockersaund Abbey from all manner of secular exactions, suytes and servises w'soever." It embodies a command by John of Gaunt, Duke of Lancaster, etc., to certain people named, that they shall not molest or otherwise grieve the Abbot and Canons of Cockersand, contrary to the provisions of the grant which, together with its confirmation by Richard II., it proceeds to recite. Amongst the long list of "secular exactions," etc., enumerated, from which the Abbey is to be exempt is "Swanadge," *i.e.*, payment for the right to keep Swans. Unfortunately the name of the King, the original grantor, is not mentioned in the body of the deed, though given in the endorsement as King John (1199-1216). The wording of the sentence where the name should occur is awkward and unusual, so that it is certain that the omission is an error or slip on the part of the translator; while, seeing that Cockersand Abbey was not founded until the end of the twelfth century, it is all the more probable that such a charter of liberty from secular exactions would have been granted in the first place by John. That being the case, payment for the right to keep Swans was evidently recognized as one of the profits of the Crown at the beginning of the thirteenth century.

The second piece of evidence is contained in the story of the tame Swan of St. Hugh of Lincoln, as related by Giraldus Cambrensis in his lives of St. Remigius (*c.* XXIX. *De Hugone Lincolnensi*) and St. Hugh (*c.* X.). Bishops of Lincoln, that together compose the manuscript No. 425 in the library of Corpus Christi College, Cambridge, known as the Lincoln Treatises. The original has been edited for the Rolls Series by J. F. Dimock and forms Vol. VII. of the works of Giraldus. No English translation has been published.

Of the authenticity of the MS. the editor writes, "of all early manuscripts of Giraldus's different works, this has the best claim to be looked upon, if not as his own autograph copy, yet as written and revised and added to under his own eye. At any rate it was in all likelihood written before Giraldus's death [*circa* 1220]. It certainly gives us a most correct text; and the text probably of Giraldus's last revision." The story of the Swan occurs in both treatises, but the essential passages for the present purpose

are word for word the same in both. It was evidently first written for inclusion in the life of St. Remigius, as a remarkable occurrence of recent happening and afterwards copied into its more relevant position in the life of St. Hugh. The latter was probably completed at Lincoln, after Giraldus returned there in 1203. The former was, from internal evidence, written before the death of St. Hugh (in the autumn of 1200), but not before 1197, most probably between 1196 and 1199, when Giraldus was residing at Lincoln. Here he not only had access to the cathedral archives but was necessarily more or less in contact, if not with St. Hugh himself, with his immediate following, only eleven or twelve years after the events he relates took place.

After referring to St. Hugh's wonderful gift in taming wild birds, for which he appears to have had a great reputation, Giraldus goes on to remark that on the attainment of his episcopacy this gift was immediately manifest in the case of, not a small bird, but a large and royal one (*ab ave grandi et regia*) a significant phrase from an historical point of view. He then goes on:—"For on the very day, or about the day before, that Bishop Hugh was first received and enthroned at Lincoln [September 29th, 1186], there flew down on to his manor, pleasantly situated amongst woods and meres near Stowe, some eight miles distant from Lincoln City, a swan such as had never before been seen there. Who, within the space of a few days, overwhelmed with his great bulk and slew all the swans, that he found there in large numbers; one however, of the female sex, he saved alive, not for the increase of her fertility, but for the comfort of her society. He was in truth by quite as much larger than a swan as a swan is bigger than a goose; he was nevertheless in all things very like a swan, especially in colour and whiteness: in addition to his size he was also unlike them in this, that he did not exhibit the knob and the black colour on the bill after the manner of swans (*quod tumorem in rostro atque nigredinem more cignorum non præferebat*), but had in truth the same part of the bill flat and together with the head and upper part of the neck, becomingly adorned with yellow."

Giraldus goes on to relate how he immediately attached himself to the Bishop and would only feed from his hand or in his absence from the hand of his bailiff and attacked those that approached the Bishop at meal times, etc., etc.

Giraldus, like other ancient chroniclers, appears to have been vague as to dates, but this failing apart, his text, as Mr. Dimock remarks, with regard to the strictly historical

part is sober and trustworthy enough. From the description, St. Hugh's pet Swan would seem to have been a Whooper and its actual existence as a sort of house-dog is vouched for by the fact that Giraldus remarks in another passage that he himself had seen it. Whether the anecdotes he relates about it are literally true or not does not matter, neither do the one or two inaccuracies in his description of it, the exaggeration of its size and the extension of the yellow colour from the bill on to the head and neck; they are just the kind of exaggerations to be expected in a chronicle of this period. The important points that emerge are, that the Swan was already reckoned a royal bird and that Giraldus was quite well acquainted with the Mute Swan and its outstanding features, which he refers to quite accurately, while it is well nigh impossible for him to have invented certain details of the story, had not Mute Swans been pretty commonly kept in such places as the Bishop of Lincoln's park at Stowe in A.D. 1186.

This, together with the facts already referred to showing that the Mute Swan was distributed in considerable numbers over the greater part of England prior to 1250, seems to dispose finally of the statement that it was introduced into England from Cyprus by, or in the reign of Richard I., who did not commence his reign till 1189 and did not return from the Crusade before 1192. In any case it could hardly have been necessary to have gone as far as Cyprus for them.

What then was the origin of the Mute Swan in England? Two other hypotheses have been suggested. The first, by Dresser (*B. of Europe*), that it was introduced by the Romans, the acclimatizers of the Fallow Deer and Pheasant and perhaps of the Peacock, is, however probable, pure supposition. There does not at present appear to be any evidence in the least bearing upon it.

The second, which had already afforded me some food for thought, has been recently suggested by Mr. A. H. Evans (*Nat. Hist. of Wicken Fen*, p. 31), viz., that the species was in remote times indigenous in East Anglia, though perhaps not in large numbers, and that it was gradually brought into a condition of semi-domestication, with, as time went on, a corresponding gradual extinction of the wild stock. It is, of course, quite easy to see how such a state of affairs could be effected and the suggestion is undoubtedly attractive. As a theory it is paralleled to a considerable degree by the history of the Grey Lag-Goose in the same area, and is not necessarily invalidated by Newton's dictum that "all the legal

protection afforded to the Swan points out that it was not indigenous to the British Isles." Mr. Evans bases his suggestion on the fact that Swan bones (*sp. incert.*) have been found in the Fenland peat deposits, and that this is too far south for the Whooper. There seem to be two drawbacks to this deduction, the first is the doubt as to whether, except in the case of the sternum and perhaps in the case of the skull, the bones of the Mute Swan can be distinguished from those of the Whooper; the second, that if it were proved that these remains are those of the Mute Swan, it would not necessarily prove that the individuals to which they belonged were indigenous rather than migrants, though the former is certainly the more probable. The bones would with little doubt be accepted as evidence of its former indigenous status, in the same way as those of the Crane and the Pelican are, but for the fact that it has been domesticated for so many centuries and the universally accepted theory that it was originally introduced.

I do not know that the matter is worth arguing further at present, but there are one or two points that are perhaps worth mentioning. In the first place it is certainly a fact of some significance that in the tenth century Anglo-Saxon Vocabulary of Archbishop Ælfric two names are given for the Swan corresponding to the Latin equivalents *cignus* and *olor*. One of these must have been applied to the Mute Swan and it is perhaps more probable that an indigenous species would have been known by a distinct name than a migrant. East Anglia in the tenth century and for long after would have afforded the largest areas in England suitable for its requirements, while at the same time it is that part of England which is nearest to those of western Europe (Denmark and S. Sweden) where it is known to be indigenous. All the evidence goes to show moreover that it was in this part of England that it afterwards flourished in greatest numbers, and it is to this area that the greater proportion of its later, written, history appertains, while the greater simplicity of the swan-marks used on the eastern side of Norfolk suggests very forcibly that it was here that the earliest domestication of the species was effected.

A single point against all this is the omission of any mention of the Swan amongst the half dozen or so birds named in the description of the Fens in the eleventh century *Liber Eliensis*. But after all this is only negative evidence and cannot do more than suggest that it was, as compared with the ducks and other wild-fowl, not a very abundant species.

SOME BREEDING HABITS OF THE SWALLOW AND HOUSE-MARTIN.

BY

R. H. BROWN.

SWALLOWS (*Hirundo r. rustica*) will occasionally rear three broods from the one nest without relining it, but often the nest is relined for either the second or third brood, and once I knew a pair build a new nest for their third brood. Both Swallows and House-Martins (*Delichon u. urbica*) lay their eggs in the early morning and incubation does not commence until the full clutch is laid, the eggs being covered by the bird during the night. The incubation period of the Swallow is fourteen to fifteen days, the fledgling period twenty to twenty-two days, but if disturbed the young will leave the nest sooner; both periods are based on observations made on eight nests. The nestling Swallows generally have their eyes open by the fourth day after hatching, but in one case their eyes were not opened until the ninth day. The young are brooded in the nest at night, but the number of nights they are brooded varies. Some young are brooded each night until they leave the nest, others to within four or five days of leaving, generally all for a fortnight. The adults when brooding the young lie lengthwise along the nest; sometimes both parents brood the young, at other times only the one broods.

Both parents assist in feeding, and I have frequently seen them, whilst so engaged, alight on the soil of a garden and take away either soil or small particles of grit for their young. On one occasion I watched a pair of Sand-Martins (*Riparia r. riparia*) take away small pebbles from a gravel-path. The faeces are usually carried away and dropped, sometimes the adults eat them. When the young are nearly fledged they learn to put their tails over the nest-rim and drop their faeces on the ground. The entire brood will occasionally alter their position in the nest, the new position being diametrically opposed to the old. Often the odd member of the brood sits with its back to the others. After leaving the nest the young return to roost in it at night, or at least as many as can get into the nest, and will continue to do so until the eggs of another clutch begin to be laid. The young of both species, as is well known, are fed by their parents for some days after leaving the nest.

House Martins occasionally build a narrow, funnel-shaped opening to their nest in order to prevent the House-Sparrows from utilizing it. A nest of this species, built between the rafter and roof of a Dutch barn, was like a Swallow's, being saucer-shaped and open on the top. If the nest is damaged, even when containing eggs or young, the adults will repair it. The incubation period is the same length as the Swallow's, the fledgling period nineteen to twenty-one days (observations on four nests). Both parents assist in incubation and feeding. At one nest that I watched during the incubation period, the sitting bird used to come off the eggs each morning for half-an-hour, always at the same time. The bird incubating is fed by its mate, the latter entering into the nest for this purpose. Once I found a Martin brooding its newly-hatched young and warbling. The young Martins, when old enough, place their tails outside the nest in order to drop their fæces. The young are brooded on at night by both parents and, like young Swallows, roost in the nest at night after fledging, but the young of two broods may be found in the one nest, with their parents, at night. Once, in getting some partly-fledged Martins out of a nest in order to count them, I destroyed the nest and accordingly placed the nestlings in another Martin's nest, some distance away, that contained hard set eggs. The nestlings were reared by their new parents.

The above notes are the results of observations extending over six summers.

NOTES

SNOW-BUNTING IN WARWICKSHIRE.

THE Snow-Bunting (*Plectrophenax nivalis*) is so uncommon in the Midlands that its appearance in Warwickshire is worth recording. I saw one in Sutton Park on November 21st, 1923. It was running quickly along the open heath when first seen, but it frequently allowed me to approach within eight or ten yards before it ran a little further, or took a short flight.

B. A. CARTER.

NOTES ON THE BREEDING OF THE MARSH-WARBLER IN BERKSHIRE.

THE Marsh-Warbler (*Acrocephalus palustris*) was recorded as breeding in Berkshire in 1920 and 1921 (*Brit. Birds*, Vol. XV., p. 203). During the summer of 1923 I have had further opportunities of investigating the subject and from my notes for this and previous seasons some modification seems necessary.

From examination of my notes and eggs taken in 1920 and 1921 it would appear that the colony recorded did not consist solely of Marsh-Warblers, but also contained some Reed-Warblers. This season, from the same locality, I have taken a clutch of three typical Marsh-Warblers' eggs containing a Cuckoo's egg. The owners of this nest were observed at very close quarters and were, without doubt, Marsh-Warblers. Other nests were found and one in particular was of interest in that a Cuckoo's egg which it contained bears a striking resemblance to one found in the same locality in 1921.

A. STEVEN CORBET.

THE NESTLING MARSH-WARBLER.

As the nestling of the Marsh-Warbler (*Acrocephalus palustris*) is not described in the *Practical Handbook* perhaps the following notes may be of interest.

The young Marsh-Warbler is hatched blind, but the eyes begin to open on the third day of life. It is devoid of down and looks dark, especially when viewed in the nest, being of a dirty dark flesh colour, sooty-black on the feather tracts. The bill is mainly yellow, but it has a dark tip. Moreover, a dark *broken* line is noticeable on each side of the bill, extending from the forehead to the tip. The gape is yellow;

the interior of the mouth pale mustard-yellow, with two dark tongue-spots. The legs are of a much paler flesh tint than the body colour, especially from the tarsal joint downwards, while the feet are quite pale pinkish-flesh. The young stay in the nest from 10 to 12 days. Just before they leave it I have the following notes on their plumage: Upper-parts, head included, are a warm mouse-brown with, in some lights, a tinge of cinnamon, in others a tinge very nearly resembling the colour of the Jay's upper-parts, but the wings are darker than the back, especially the primaries, which are dusky-brown, the secondaries being intermediate in colour between back and primaries, though more nearly approaching the latter. Tail slightly darker than back. On the whole they show a reddish-brown tint above. Under-parts warm buffish with almost a pinkish shade in some lights. Legs greyish-brown with possibly a faint pink transparent look, as are also the feet except the underside which is yellow; claws greyish, undersides yellowish or even yellow. Iris very dark brown. Gape yellow, bill greyish above with a faint pale line down middle; below yellow, with just a trace of pink.

J. A. WALPOLE BOND.

YELLOW-BROWED WARBLERS IN LINCOLNSHIRE.

THE Yellow-browed Warbler (*Phylloscopus h. præmium*) occurred in Lincolnshire this autumn. On October 12th, 1923, I shot a very pretty bright-coloured example in a hedge at North Cotes. There was little migration in progress, a few Robins and Blackbirds, and I saw the first Rock-Pipit and Jack Snipe. The wind was S.E. with heavy rain. On October 19th I shot another of these birds. It was not so brightly coloured as the one shot on the 12th and scarcely showed the pale stripe on the crown. It was almost in the same spot as the previous bird. There were few small birds travelling, but I saw a Redstart and shot a Mealy Redpoll. There was, however, a very heavy passage of Redwings, Starlings, Larks, Linnets and Lapwings in progress. The wind was light S.W., but had been S.E. through the previous night.

G. H. CATON-HAIGH.

TWO UNUSUAL BLACKBIRDS' NESTS.

IN June, 1922, I came across two Blackbirds' (*Turdus m. merula*) nests which are rather out of the ordinary. The first was built on the ground in Dr. Gadow's garden at Shelford, near Cambridge. It was situated under a fir tree and more or less sheltered. As can be seen in the photograph it was

surrounded with a quantity of dead leaves and twigs. The second was an unusually shallow nest. I found it in a box-tree in the Fellow's garden of Selwyn College. It was placed amongst the twigs near the edge of the tree and just beyond reach of my hand. On windy days the three young ones



seemed to be in danger of being blown off the nest, but all were reared successfully.

The diameter of the nest was about $3\frac{1}{4}$ inch, the depth less than $1\frac{1}{2}$ inch, and I could see the eggs just above the level of the nest.

MASA U. HACHISUKA.

REMARKABLE NESTING-SITE OF SAND-MARTIN.

On May 28th, 1923, while waiting for the up train on Rye House Station, G.E.R., I saw several Sand-Martins (*Riparia r. riparia*) flying up and down the line. Some were carrying nesting materials and I was astonished to see several of them disappear into holes in the brickwork of the side of the platform, just over the metals.

I mentioned this to the guard of the train, and he informed me that they had bred there for several years. There are no fast trains on this branch, otherwise the birds must surely have been killed.

It is remarkable that the birds should have chosen such a precarious position, when there are plenty of gravel and sand pits quite near.

P. F. BUNYARD.

LARGE CLUTCH OF PEREGRINE FALCON'S EGGS.

It may be worth recording that I have a clutch of five eggs of the Peregrine Falcon (*Falco p. peregrinus*) taken in 1911 at St. Kilda.

E. RICHMOND PATON.

SHELD-DUCKS, SHAG AND MANX SHEARWATER IN WARWICKSHIRE.

THE stormy weather at the end of August and the early part of September 1923, seems to have driven many birds inland and several of them reached Warwickshire.

A Sheld-Duck (*Tadorna tadorna*) appeared in Sutton Park on August 24th, and on the 31st there were eight. All were in juvenile plumage without the band across the breast. I have only seen one Sheld-Duck in Sutton Park during the previous twelve years.

On September 1st I saw a Shag (*Phalacrocorax a. aristotelis*) and was told that it had arrived a day or two earlier. It was in juvenile plumage—upper-parts brown with the beginning of a green gloss, breast and under-parts brownish with darker streaks, and chin white. It spent most of its time on an islet about twenty-five yards from the bank and ignored passing boats unless the occupants went straight towards it. Then it shuffled hurriedly and awkwardly to the edge and plunged into the water, reappearing at a short distance. It was able to fly, swim and dive, but made no attempt to leave the "pool." On September 14th it was not to be seen in its usual haunts and was found dead in the reeds.

On September 11th a Manx Shearwater (*Puffinus p. puffinus*), with an injured foot, was picked up in a garden about a mile and a half nearer Birmingham than Sutton Park. In spite of the fact that it would not take food, it lived till September 23rd.

B. A. CARTER.

PROBABLE FERRUGINOUS DUCK IN SOMERSET.

ON November 26th, 1923, on No. 2 reservoir, Barrow Gurney, Somerset, I had a Duck under observation for two hours

which was quite new to me; I tried to associate it with the various species I knew but it was different. It was an intensely cold day, but the sun shone strongly when I reached the reservoirs.

I was first attracted by a silvery glitter across the water which I took to be the breast of a Great Crested Grebe, but fixing the glasses on it I saw it was a Duck. It was alone, although there were Golden-eye, Mallard, Tufted Duck and Pochard on the same water. It dived continually and very often raised itself well out of the water and flapped its wings in the sun, and facing me, showing as it did so, beautifully Grebe-like silvery under-parts and fairly conspicuous wing-bars; these wing-bars were also conspicuous as the bird swam with folded wings, contrasting with the dark upper-parts.

I noticed distinctly the white eye of the bird but not a white spot on its chin, partly perhaps because of its quick actions. I was at the reservoirs again the next morning but could not find the bird.

On getting home I consulted the *Prac. Handbook* on the Ferruginous Duck (*Nyroca nyroca*), for I had already fixed it as such in my mind, although I had never seen one of this species alive. The description therein, in my opinion verifies the observation.

STANLEY LEWIS.

SANDWICH TERNS IN NORFOLK AND THE NORMAL CLUTCH OF EGGS.

THE Sandwich Tern (*Sterna s. sandvicensis*) nested very satisfactorily in Norfolk again in 1923, though many nests were lost early in the season through the depredation of Gulls. I was struck, however, by the fact that out of about 500 nests there was not a single clutch of three eggs and only about 10 per cent. were of two. Although I have had no other experience of these birds nesting, I have so often seen threes in collections that it seems likely either that unscrupulous keepers send on threes to unsuspecting collectors, or that in certain years and localities this is not an unusual number.

I wrote to ask Mr. Carroll what his experience has been, as I knew he had visited some quiet colonies in Ireland, and he says "Of course two is the usual set, but where they were absolutely undisturbed in Ireland I have *twice* found threes out of several hundreds seen." Mr. Carroll adds that he twice saw threes at Ravenglass, but that these are the only four cases he personally knew of, and that he does not think a three occurs oftener than say one in three hundred.

Mr. G. R. Humphreys, whose delightful Tern articles have recently appeared in *British Birds*, tells me that he has visited three colonies of Sandwich Terns in Ireland during the past two years, but did not see a three.

I only refer to these Irish colonies because they are unlikely to have been in any way tampered with, but the experience of these gentlemen seems to confirm my own idea that a genuine clutch of three in this species is extremely rare ; and it is indeed a little difficult to think so small a bird could cover three eggs.

I am not sure I quite agree with Mr. Carroll about two being the normal clutch, which I should say is a single egg. It would interest me very much if any reader of *British Birds* who has visited really undisturbed localities and found threes would let us know.

CLIFFORD BORRER.

[See the correspondence on this subject, Vol. III., pp. 129-30, 169-171, 198-200, 222-4, etc.—EDS.]

BRITISH BLUE TIT IN ALDERNEY.—In a list of the birds of Alderney in the *Ibis* (1921, pp. 415-453), Major W. R. Thompson assigned the Goldfinch, Bullfinch, Great Tit, Blue Tit, Song-Thrush, and Robin breeding in that island to the British forms, but he brought forward no proof of this. Recently (*Ibis*, 1923, pp. 779-81) Major Thompson admitted that he had done this without due consideration, but from specimens since obtained and submitted to the British Museum authorities he considers that the Song-Thrush, Robin and Blue Tit are of the British forms, while a Great Tit obtained in March was identified as *Parus m. major* and one in July as *P. m. newtoni*. By the courtesy of the authorities at the Museum I have examined the specimens and can confirm that the Blue Tits are *Parus cæruleus obscurus*, and as these were obtained in July, September and October we can accept this as the breeding form, which is an interesting fact when we consider how much nearer Alderney is to the coast of France than to England. The Great Tit, obtained in July, is in juvenile plumage but fully grown, and its bill is much too fine for the British form. The bird in my opinion is certainly *Parus major major*, as are two adults procured in March and November. The only Song-Thrush sent is certainly *Turdus ph. clarkei*, but as it was obtained in February it may have been a migrant and affords no evidence as to the subspecies breeding in the island, and the same may be said of a Robin, which I have been unable to examine, obtained on September 17th, 1922.—H.F.W.

GREAT SPOTTED WOODPECKER BREEDING IN FORFARSHIRE.—Mr. D. J. Hunter states (*Scot. Nat.*, 1923, p. 140) that *Dryobates major anglicus* bred near Edzell (Forfarshire) in 1923 and during the past two seasons near Montrose. One of the Edzell birds was shot by a keeper who was fined and the bird confiscated. This bird has been examined by the Editors of the *Scottish Naturalist* who state that it is of the British race. As the Great Spotted Woodpecker has spread so remarkably in Scotland recently and specimens had not been examined it is satisfactory to have definite knowledge of the subspecies to which the birds belong.

HOOPOES IN SCOTLAND.—Single examples of *Upupa epops* are recorded (*Scot. Nat.*, 1923, p. 94) from Carrick (Kirkcudbrightshire) on April 14th, 1923, and from near Balerno (Midlothian) on April 15th, 1923. Another is recorded (*l.c.*, p. 140) as having been captured at Airdrie (Lanarkshire).

LITTLE OWL BREEDING IN YORKSHIRE.—In the Annual Report for 1922 of the Yorkshire Naturalists' Union (*Nat.*, 1923, p. 30), *Athene n. mira* is recorded as breeding in Holderness in 1922 and "seems to have spread over the whole of the East Riding."

TURTLE-DOVE IN BANFFSHIRE.—Miss J. Gowan records (*Scot. Nat.*, 1923, p. 132) the occurrence of a *Streptopelia t. turtur* near Cullen on May 31st, 1923.

SCANDINAVIAN LESSER BLACK-BACKED GULLS AT ISLE OF MAY.—The Misses Rintoul and Baxter give details (*Scot. Nat.*, 1923, p. 134) of several observations made from the Isle of May of the spring passage of *Larus f. fuscus* in 1923, viz.:—May 1st, six passing over going north; 3rd, three going north; 4th, single bird going N.N.W.; 5th, 7th, and 13th, single birds going north.

DISAPPEARANCE OF YORKSHIRE NESTING-COLONY OF BRITISH LESSER BLACK-BACKED GULL.—Mr. H. B. Booth states (*Nat.*, 1923, p. 29) that no birds nested in 1922 at the small nesting-colony of *Larus fuscus affinis* near Malham Tarn (the only one inland in Yorkshire).

COMMON CRANE FOSSIL IN YORKSHIRE.—A sub-fossil tibio-tarsus of a bird found during excavations at Walton Abbey has been identified by Mr. E. T. Newton (*Nat.*, 1923, p. 284) as that of a Common Crane (*Megalornis grus*).



LETTERS

BIRDS REMOVING NESTING MATERIAL TO ANOTHER SITE.

To the Editors of BRITISH BIRDS.

SIRS.—Mr. B. W. Tucker has called my particular attention to Mr. F. L. Blathwayt's letter "A Habit of the Lesser Redpoll" (p. 148), since the habit therein mentioned is possibly the solution of a mystery that sorely puzzled Messrs. F. C. R. Jourdain, B. W. Tucker and myself at Hammerfest in June 1922. On the 16th we found five nests of the Mealy Redpoll (*Carduelis l. linaria*), containing respectively one, one, one, three, and no eggs, in two different willow plantations several miles apart. On the 17th I visited all these nests by myself, and to my complete mystification found that every nest but one (which now had two eggs) was disarranged and the eggs, where there had been any, were missing. The one nest found without eggs on the 16th was so badly disarranged that its feather lining was scattered all about the immediate neighbourhood. What makes my experience rather inconclusive as regards a Redpoll habit is that an empty Fieldfare's (*Turdus pilaris*) nest and a Redwing's (*T. musicus*) nest with two eggs, found June 16th, in one of the two localities, were also disarranged and the eggs gone from the Redwing's. The question is, did the Redpolls etc., in all these cases destroy their nests and if not, what did? Norwegian boys have not the destructive propensities of ours, and if the nests were destroyed by human agency it is most remarkable that, out of seven nests found by experienced eyes, six should have been discovered and wantonly destroyed, in far apart localities, within twenty-four hours of our finding them!

There was a pair of Hooded Crows (*Corvus cornix*) in one plantation, and certainly no Jays or Magpies in either—also several nests of various species with full complements of eggs in process of being incubated.

W. M. CONGREVE.

To the Editors of BRITISH BIRDS.

SIRS,—I can endorse Mr. Clifford Borrer's remarks (*antea*, p. 171), under the above heading. The same thing happened with the Ravens at the Cheddar cliffs in the spring of 1922. After the eggs disappeared a good deal of the material was removed to the new site and a previous year's nest was also robbed of its remaining materials which had been safely preserved on a broad ledge.

In my notes on Cheddar Ravens (Vol. XIV., p. 26), I had not then observed this habit.

STANLEY LEWIS.

NEST MATERIALS OF PIED FLYCATCHER.

To the Editors of BRITISH BIRDS.

SIRS,—In reference to Mr. Stanley Lewis's letter (*antea*, p. 171), I have before me four nests of the Pied Flycatcher, which I found in Radnorshire, none of which contain feathers. I find the following materials used :—

Decayed oak, beech, and other leaves, fine and coarse grass bents and blades, fibrous inner bark, small pieces of moss, bracken, and in two

cases a little wool, outer skin of birch bark. Quantitatively, the materials vary, according to situation and size of hole.

Mr. Owen R. Owen has had considerable experience with the Pied Flycatcher, and he informed me that he had never known feathers to be used.

It is well known that the Pied Flycatcher will drive out Tits. I have found an egg of the Great Tit in one nest, feathers may possibly have been introduced by them.

P. F. BUNYARD.

GADWALL IN LONDON.

To the Editors of BRITISH BIRDS.

SIRS,—In the last issue of *British Birds* (*antea*, p. 167), Mr. W. M. Crook mentions the presence of a Gadwall drake (*Anas strepera*) on the Round Pond in Kensington Gardens. I know this bird well, having studied it for the past two years. In the summer of 1922 it paired with a Mallard Duck, but whether any offspring resulted or not I do not know. In the autumn of 1922, some time before the pond was emptied for cleaning, I saw another Gadwall drake with it one day, the two birds swimming about together. This second visitor did not stay long, however. When the pond was emptied last winter, 1922–1923, all the Ducks left, the Gadwall included. I watched with interest to see if it would return and sure enough, when the pond was refilled, it did, and at the present date is a resident there.

I unfortunately missed the two Scaup Duck that Mr. Crook saw, though I am very often round the pond. I expect from this that they were only temporary visitors and soon left. There are, of course, large numbers of wild Pochards and Tufted Duck on the Serpentine and Long Water every winter, and from time to time some of these visit the Round Pond.

G. C. Low.

December, 1923.

LARGE CLUTCHES OF EGGS.

To the Editors of BRITISH BIRDS.


SIRS,—There is nothing remarkable in birds laying one, or even more eggs, than the normal clutch.

With the Limicolæ it is not at all unusual. I have the following records :—


Stone-Curlew (*Burhinus æ. ædicnemus*) clutch of three (A. H. Meiklejohn), Woodcock (*Scolopax rusticola*) clutch of eight (J. M. Goodall), Greenshank (*Tringa nebularia*) clutch of five (P.F.B.), Curlew (*Numenius arquata*), clutch of five (David Welburn), Kentish Plover (*Charadrius alexandrinus*) clutch of four (Continental), Little-ringed Plover (*Ch. d. curonicus*) clutch of five (Continental), Dotterel (*Ch. morinellus*) clutch of four (Continental, Helge Lilliestierna), Lapwing (*V. vanellus*) clutch of five (P. W. Munn, and self many times), Oystercatcher (*H. ostralegus*) though the normal clutch appears to be three, many fours are found from time to time.

In all the above cases, in each clutch, the eggs are as alike as peas, and cannot possibly be otherwise than the produce of the same bird.

P. F. BUNYARD.



REVIEWS



Notes on the Birds of Dumfriesshire, a continuation of the Birds of Dumfriesshire. By Hugh S. Gladstone (Dumfriesshire and Galloway Nat. Hist. Soc.). 10s. net.

MR. GLADSTONE is a most diligent and methodical recorder of his county's avifauna. In 1910 we had his excellent *Birds of Dumfriesshire*, in 1911 he published *Addenda and Corrigenda* to that work, while in 1912 he gave us *A Catalogue of the Vertebrate Fauna of Dumfriesshire*. In the book now under notice, the 1911 *Addenda and Corrigenda* are included, so that possessors of the original *Birds of Dumfriesshire* should make sure of obtaining this continuation, which brings that work up to date, is well produced and most carefully edited.

Amongst many items of interest we may mention the following: a long list of records of ringed birds is useful; we are glad to see the Red-backed Shrike relegated to square brackets; the Lesser Whitethroat is stated to breed annually near Kinmount, and the author states that an egg taken there in 1912 or 1913 and sent to him for identification was undoubtedly that of a Lesser Whitethroat; young Hawfinches were found in 1919 and 1922 and a number of adults are recorded at various dates from various localities; Crossbills are stated to have nested near Craigdarroch in 1918; the Jay is increasing; a Rook's nest on the top of the spire of St. John's Church, Dumfries, is illustrated; comparative figures are given for various years of the number of Rooks' and Black-headed Gulls' nests in the county; the Great Spotted Woodpecker "is now firmly established"; Golden Eagles nested in 1921 in a neighbouring county within sixteen miles of the boundary, two eggs were laid but unfortunately proved to be infertile, and the bird did not return in 1922; the Glossy Ibis is an addition to the county, a flock of four having appeared in 1911; some interesting information is given about Sir Richard Graham's Duck-breeding experiments on the Solway, from which it appears that a number of these Ducks, including full-winged American Wigeon, were driven away during the war by search-lights and want of food, and a bird shot in November, 1918, and identified as an American Wigeon, is properly placed in square brackets; a white Curlew has been observed annually at Shinnel water from 1904 to 1922.

The work is published by the county Natural History Society and thoroughly deserves the support of all those interested in county avifaunas.

Report on Scottish Ornithology in 1922, including Migration.
By Evelyn V. Baxter and Leonora J. Rintoul. (Reprinted from *The Scottish Naturalist*, 1923, pp. 65-84, and 101-122).

THIS report is in its usual excellent form and contains a number of items of particular interest. A considerable number of rare visitors are included, chiefly in the autumn of 1922, while a number of valuable observations are recorded on the increase and spread of various species in the breeding season. Details are given below of the most important items, which have not previously been mentioned in our pages.

GOLDEN ORIOLE (*Oriolus o. oriolus*).—One at the Isle of May on August 7th.

NORTHERN BULLFINCH (*Pyrrhula p. pyrrhula*).—A few at Fair Isle on January 12th.

LAPLAND BUNTING (*Calcarius l. lapponicus*).—At Isle of May, September 27th and 28th, Fair Isle, October 3rd, 9th and 10th; Hyskeir, November 16th, this last being reported as the first record for the Inner Hebrides.

WOOD-LARK (*Lullula a. arborea*).—One at the Isle of May, September 20th and 27th.

RED-BREASTED FLYCATCHER (*Muscicapa p. parva*).—One at the Mull of Galloway (Wigtonshire) on September 24th, this being the first record for the Scottish mainland; one Isle of May, September 28th.

EVERSMANN'S WARBLER (*Phylloscopus b. borealis*).—One was obtained on Fair Isle on September 27th. This is the fourth record for Scotland, and it will be remembered that Mr. E. C. Arnold obtained one in Norfolk on September 4th, 1922 (*antea*, Vol. XVI., p. 162).

YELLOW-BROWED WARBLER (*Ph. h. præmum*).—Several Isle of May between September 24th and October 1st, as many as four or five being seen on the 28th.

BARRED WARBLER (*Sylvia n. nisoria*).—One Isle of May, September 25th.

MARTIN (*Delichon u. urbica*).—One or two pairs reported as nesting on the cliff at Fair Isle.

GREAT SPOTTED WOODPECKER (*Dryobates major anglicus*).—In connection with the spread of this species further interesting reports are as follows:—Seen and heard at Gilston (Fife) but no proof as yet of nesting; a pair nested near Cairnton Water (Kincardine), and it is recorded from the eastern Sidlaws (borders of Forfar and Kincardine); "a good many were about" Aboyne (Aberdeen) in July; it was seen in June near Arndilly (Banffshire); it is reported as increasing about Perth and has been seen in Strath-tummel in the north of the county. The bird thus seems to be establishing itself in the eastern half of Scotland as far north as the Spey valley.

LESSER SPOTTED WOODPECKER (*D. minor*).—In the *Field* (May 6th, 1922, p. 622) Mr. Steuart Menzies recorded that he had "located one pair, if not two, of the Lesser Spotted Woodpecker" at Arndilly (Banffshire). In the same journal (May 20th, p. 692) Major C. R. Bates stated that he saw a pair at Carnegie Salmon Throw in the middle of April and again a little higher up the Spey (the three localities are close together), while others were reported to Dr. Mahood in June, July and August. We are sorry to see all these records accepted in this report, because no evidence is given that the birds were Lesser Spotted Woodpeckers, and none of the recorders states how he

distinguished the bird from the Great Spotted Woodpecker, although later Mr. Steuart Menzies records the latter species from the same district. Major Bates states that he knows the Lesser Spotted Woodpecker as it is fairly common where he lives in Cheshire, but the bird is scarce even in that county and he does not mention the Great Spotted. The Lesser Spotted Woodpecker is not a migrant or wanderer, and it is extremely unlikely to appear suddenly in some numbers 200 miles or more north of its range in this country. We think the bird has been confused with the Great Spotted Woodpecker and we should require convincing evidence before accepting the records.

HOBBY (*Falco s. subbuteo*).—One was seen three times at Rowardennan, Loch Lomond, in June.

HEN-HARRIER (*Circus c. cyaneus*).—A pair attempted to nest a few miles from Perth, but both old birds were destroyed.

GANNET (*Sula bassana*).—A pair built a nest on the Isle of May, but deserted it, and no egg was laid.

FULMAR PETREL (*Fulmarus g. glacialis*).—Two pairs frequented the cliffs of the Isle of May and it is believed that they bred there, though the eggs could not actually be seen.

RED-THROATED DIVER (*Colymbus stellatus*).—Proved to be breeding on Islay.

LITTLE STINT (*Calidris m. minuta*).—One on Vallay on June 27th is recorded as the third occurrence of the species in the Outer Hebrides, but if we accept Mr. Beveridge's statement (*Scot. Nat.*, 1918, p. 216), it has occurred on a good many more occasions.

RED-NECKED PHALAROPE (*Phalaropus lobatus*).—There were two nests on Vallay (O. Hebrides).

ROSEATE TERN (*Sterna d. dougalli*).—Reported in May and June from two Scottish localities (not named).

GREAT BLACK-BACKED GULL (*Larus marinus*).—A pair found nesting on the south Ayrshire cliffs in May is stated to be the first breeding record for that county.

ICELAND GULL (*L. glaucoides*).—One at Oban from April to the middle of July, when it was killed with a stone, being very tame.

ARCTIC SKUA (*Stercorarius parasiticus*).—Breeding is recorded for the first time on Islay.

BLACK GUILLEMOT (*Uria g. grylle*).—About ten pairs were found nesting in the south Ayrshire cliffs.

H.F.W.

A Chronological List of British Birds. By H. Kirke Swann. (Wheldon.) 5s. net.

IN this pamphlet Mr. Kirke Swann has taken the scientific names used in our *Handlist of British Birds* (1912) "with necessary emendations which have since arisen" and arranged them in order of date. To this he has added indications of the derivation of the names and a list of discarded names. In his "emendations" he seems to have followed his own ideas rather than ours or those of the B.O.U. List Committee, since, for instance, *boarula* is retained for the Grey Wagtail, *tschegrava* is rejected for the Caspian Tern, but *pleschanka*, also of Lepechin, is retained. We notice a few misprints: *Lyurus*, *Milous migraus*, *Astur gentilis*. We think that a chronological order greatly limits the use of such a list,

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS, which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND.

TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.

F. H. L. WHISH,
LYMPHAM, SOMERSET.



A BOOK FOR THE SEASON.

How to Attract and Protect Wild Birds.

By **MARTIN HIESEMANN.**

With an Introduction by Her Grace the Duchess of Bedford.

Many Illustrations. Stiff Boards, 1s. 6d. net.

(By Post 1s. 9d.)

A practical guide for all who wish to attract the birds to their doors and induce them to nest in their gardens, whether large or small.

LONDON : H. F. & G. WITHERBY, 326, HIGH HOLBORN.

W. & A. K. JOHNSTON'S TRACKS OF BRITISH BIRDS CHART

Edited by H. MORTIMER BATTEN, F.Z.S.

The issue of this chart is an event of great interest to the large number of schools which now undertake Nature Study, to all Boy Scout and Girl Guide Organisations, and indeed, to everyone interested in Natural History throughout the land. The Tracks are drawn life-size, and printed in black and blue so as to assist the work of identification.

Price 4s. net each (Postage 4d. extra) From your Bookseller, or direct from the Publishers.

W & A. K. JOHNSTON



EDINA WORKS, EASTER ROAD, EDINBURGH.

LE GERFAUT **REVUE BELGE D'ORNITHOLOGIE,**

Fondée en 1911.

Le seule publication scientifique belge traitant des oiseaux, spécialement des oiseaux de la Belgique.

Abonnement 10 francs par an.

Direction : Square Prince Charles 21, Bruxelles-Laeken (Belgique).

FOR SALE.

**ARCTIC BIRDS' SKINS,
MAMMALS,
SKULLS AND EGGS.**

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22.

Full particulars on application.

G. DINESEN, Dannebrogsgade 8, Copenhagen, B. DENMARK

Birds

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

FEB. 1.
1924.

Vol. XVII.
No. 9.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

W. F. H. ROSENBERG,

Naturalist & Importer of Exotic Zoological Collections

Head Office and Museum of Bird Skins and Exotic Lepidoptera, etc.,

57, HAVERSTOCK HILL, LONDON, N.W.3.

PRICE LISTS—Birds' Skins (5,000 species),

Exotic Lepidoptera (8,000 species)—Post Free.

Branch Establishment for the supply of Entomological and other Natural History requisites, books, and specimens—

25, CROMWELL PLACE, LONDON, S.W.7.

(Near the Natural History Museum.)

Price List of Apparatus Post Free.

A BOOK FOR THE SEASON.

How to Attract and Protect Wild Birds.

By MARTIN HIESEMANN.

With an Introduction by Her Grace the Duchess of Bedford.

Many Illustrations. Stiff Boards, 1s. 6d. net.

(By Post 1s. 9d.)

A practical guide for all who wish to attract the birds to their doors and induce them to nest in their gardens, whether large or small.

LONDON : H. F. & G. WITHERBY, 326, HIGH HOLBORN.

NATURALISTS, PRIVATE COLLECTORS, &c.

Interested in the Birds, Birds' Eggs and Mammals of the ALPS OF SWITZERLAND AND OF SPAIN, should send particulars of their requirements to:—

E. FLÜKIGER,

Collector and Naturalist,

INTERLAKEN, SWITZERLAND.

CORRESPONDENCE INVITED.

FOR SALE.

ARCTIC BIRDS' SKINS,

MAMMALS,

SKULLS AND EGGS.

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22.

Full particulars on application.

G. DINESEN, Dannebrogsgade 8, Copenhagen, B. DENMARK

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."
EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 9, VOL. XVII., FEBRUARY I, 1924.

	PAGE
Surrey Field-Notes. By Percy F. Bunyard, F.Z.S., M.B.O.U., M.B.O.A.	198
The Nest-Building and other Breeding Habits of the Long-tailed Tit. By R. H. Brown	206
Notes :—	
Pine-Cones and Woodpeckers (H. F. Witherby)	208
Great Spotted Woodpecker in N. Lancashire (Thos. L. S. Dooly)	208
Large Clutch of Peregrine Falcon's Eggs (Lewis R. W. Loyd)	209
Hen-Harrier in Lancashire (Thos. L. S. Dooly)	209
Wild-Fowl at Staines Reservoir (William E. Glegg)	209
Goosanders in Middlesex (A. Holte Macpherson)	209
Shag in Oxfordshire (R. C. Davison)	210
Great Crested Grebe in London (R. C. Davison)	210
Ruff and other Visitors at Somerset Reservoirs (B. W. Tucker)	210
Spotted Redshanks in Somerset (E. Page and B. W. Tucker)	211
Black-winged Stilt in Hampshire (Sir Thomas H. C. Troubridge, Bart.)	212
The Normal Clutch of Sandwich Tern's Eggs (H. W. Robinson)	212
Scandinavian Lesser Black-backed Gull in the Scilly Isles (H. W. Robinson)	213
Short Notes :—	
Late Stay of Yellow Wagtail. Scaup-Duck Inland in York- shire. Smews in Berkshire	213
Letters :—	
Cuckoo's Egg in Chaffinch's Nest (Geo. J. Scholey and S. B. Hodgson)	214
The Oviposition of the Cuckoo (B. W. Tucker)	214
Shag Inland in Somerset (B. W. Tucker)	216
Reviews :—	
<i>Guide to the Birds of Europe and North Africa.</i> By Col. R. G. Wardlaw Ramsay	217
<i>Game-Birds and Wild-Fowl of Great Britain and Ireland.</i> By A. Thorburn	218
<i>Birds and their Young.</i> By T. A. Coward, illustrated by Roland Green	219

SURREY FIELD-NOTES.

BY

PERCY F. BUNYARD, F.Z.S., M.B.O.U., M.B.O.A.

IN the following short paper I have endeavoured as far as possible to bring up to date my notes which appeared in *British Birds*, Vol. XIII., pp. 226-231. I have not mentioned the actual localities because, although very little information in this respect was given in the above mentioned paper, much to my regret there was sufficient indication to enable unscrupulous collectors to raid many of my old and religiously guarded Surrey haunts.

CARRION-CROW (*Corvus c. corone*).—These birds increased considerably in the county during the war while the keepers had “joined up,” but they are now being shot and poisoned in the interest of game preservation and there has been a marked decrease. In consequence the Hobby is also on the decrease, as there are few nests left for them to use.

HAWFINCH (*Coccothraustes c. coccothraustes*).—A deserted nest and four eggs were found in a small white-thorn tree on May 26th, 1923. The nest was easily reached from the ground.

CROSSBILL (*Loxia curvirostra*).—See note under Green Woodpecker.

BRAMBLING (*Fringilla montifringilla*).—There was a large flock on the Croydon sewage farm on April 5th, 1920.

WOOD-LARK (*Lullula arborea*).—In my previous notes on this species, I suggested that its presence as a breeding bird was comparatively new, and possibly temporary. It is satisfactory to record a considerable increase, in fact nearly every favourable spot is now tenanted by one or more pairs, which usually keep strictly to their territory and may be easily located by those who have had any experience of the birds.

Since 1919 a considerable number of nests have been found by my friends and myself, those which I personally inspected *in situ*, varied considerably in the actual nesting site, and the following details may be of interest:—

April 10th, 1920: four eggs, incubation advanced, nest in the side of an old furrow, slightly concealed by small tuft of grass, sandy soil.

April 11th, 1920: nest placed under the dead branch of a stunted gorse bush with four young two or three days old. The mouth-coloration of the young was orange-yellow, margined with lemon-yellow; two tiny round brownish-black

spots on the base of the tongue placed transversely, and two on the inside of the lower mandible.

March 27th, 1921: nest with four fresh eggs; in a small clump of heather, in the usual deep "scratch-out."

April 3rd, 1921: nest with four incubated eggs in a small tuft of fine grass, "scrape-out" 3 in. deep.

April 4th, 1921: nest with three eggs, in a large clump of heather 2-3 in. high, the eggs were apparently frosted.

April 23rd, 1922: nest with three fresh eggs; this was originally located by watching the birds building, during which they never left the ground, simply using materials which they found close at hand.

April 23rd, 1922: four fresh eggs, brought to me by a youth who found the nest close to a cart-track.

April 14th, 1922: nest with four fresh eggs. This was placed against the stem of a small seedling Scots pine, about 15 in. high.

April 14th, 1923: nest with three incubated eggs. This nest was placed right in the centre of a small stunted clump of *Berberis* in full flower, on private ground.

April 21st, 1923: young birds almost fully fledged. They crouched in Stone-Curlew fashion, and harmonized beautifully with the surroundings, which made them difficult to locate.

In June small flocks of 10-15 birds were put up from many parts of the common, all being young birds of the year, and family parties were frequently seen.

Once the birds are located the nest is not difficult to find. Apparently the female is called off by the male, or leaves to feed frequently, and the two fly away together. After an interval of about twenty minutes, the male brings the female back, and she drops to the ground and goes straight on to the nest, while the male continues his flight and usually settles on a Scots pine and commences to sing.

On a warm evening I have heard the male singing after 9 p.m. (summer time).

GREY WAGTAIL (*Motacilla c. cinerea*).—No apparent increase, established pairs holding their own. A nest in 1923 was taken by boys from the side of a bridge.

RED-BACKED SHRIKE (*Lanius c. collurio*).—In 1920 and 1921 they were plentiful, but in 1923, owing to the cold early spring, they did not remain to breed in any numbers in their usual haunts. After having apparently settled down, they suddenly disappeared as did many other migratory species. On June 11th, 1922, I saw a male bird with white feathers

in his beak, this being the first intimation I had had that the male takes part in building. The nest was located, and many feathers were used in its foundation.

DARTFORD WARBLER (*Sylvia u. dartfordiensis*).—I have heard that this species has re-established itself in some of its old haunts, but the same cannot be said as far as Surrey is concerned. A pair or two were seen in the early spring of 1923 in their oldest and greatest stronghold, but were not again observed and did not stay to breed.

On April 29th, 1922, while watching Stonechats in another locality, I heard a bird scolding loudly, and looking round I saw a Dartford Warbler perched on the top of a gorse bush, the first I had seen in the county since 1916. The following day Mr. Clifford Borrer and I found the birds building, and located the nest in some ling. It was almost completed and on May 6th was quite finished but contained no eggs. I concluded that the nest had been deserted, but on inspecting it again on May 13th I found the bird sitting on four eggs. Thus the nest had been completed nearly two weeks before the bird laid, which in my experience is a most unusual occurrence. The weather had been cold with many frosts. On the same day I found another nest by watching from mid-day to 5.30 p.m. It contained four fresh eggs, and was also in ling, about two feet from the ground.

It is curious that Dartford Warblers should have reappeared on this small Surrey common while the main haunts apparently remain untenanted. Unfortunately large tracts of their favourite haunts have been destroyed by fires, including the sites on which the above nests were located, and consequently the birds were not there in 1923.

GRASSHOPPER-WARBLER (*Locustella n. naevia*).—Owing to frequent fires these birds have been completely driven from many of our Surrey commons.

On May 17th, 1921, I discovered a nest with five eggs, and replaced them with five Willow-Wren's. Revisiting the nest on May 21st, I found the bird had turned out the Willow-Warbler's eggs, laid her sixth egg, and deserted. I had an exactly similar experience in 1916, in this case, however, Whitethroat's eggs were used. It is remarkable that a Grasshopper-Warbler should be able to turn eggs out of such a deep nest. Are the feet or the mandibles used?

WOOD-WARBLER (*Phylloscopus sibilatrix*).—A marked increase. In 1922 I spent with my friend C. F. Stedman a considerable time studying the habits of this interesting species, which may nearly always be found in certain parts of the county where the beech is common. Between May

26th and 31st, we located a number of nests by watching the female back. The male will frequently drive her back to the nest, and except on rare occasions generally sings fairly near, once the female has begun to sit. It is sometimes difficult to flush the female, and almost hopeless to locate the nest until this is done. The time she takes before returning depends on the state of incubation. The alarm note is incessantly repeated as she works her way back, and finally working down a branch which generally overhangs the nest. The male will sometimes visit the very tree under which the female is sitting, but on several occasions I have found him absent from the vicinity of the nesting-site, or at all events silent.

CHIFFCHAFF (*Phylloscopus c. collybita*).—Much less plentiful than the former species, my experience is that it is never common in the county. A pair (? the same) may be found in almost the exactly same spots year after year.

MISTLE-THRUSH (*Turdus v. viscivorus*).—There has been an apparent increase, but they are yet far from common, and certainly not up to their 1916 status. In June they appear in large flocks, obviously attracted by the ripe bilberries which abound in the districts, "hurts," as they are called in Surrey.

REDBREAST (*Erithacus r. rubecula*).—On March 26th, 1922, Mr. Borrer and I witnessed a very interesting display by a male which was sitting on a faggot in front of a female. Its feathers were puffed out and it moved its head slowly from side to side for some time, until finally both birds flew up and chased each other. On June 10th, 1923, we again witnessed a display, and on this occasion the male was sitting flat on a path leading across a field, the head was thrown well back, with the feathers puffed out showing conspicuously a mass of red, and the wings widely outstretched. The female was flying round. At first sight we thought the bird was injured, but as we approached to investigate he got up, and flew off.

NIGHTINGALE (*Luscinia m. megarhyncha*).—Very plentiful in 1923.

STONECHAT (*Saxicola r. torquatus*).—A steady but noticeable recovery since 1919.

HEDGE-SPARROW (*Prunella m. occidentalis*).—I saw only one nest in 1923. They still remain a long way from their 1916 status.

SWALLOW (*Hirundo r. rustica*).—Continued decrease. On April 9th, 1920, I saw the first Swallow, and on May 1st I found a nest in an outhouse with five eggs, this being my earliest date for eggs, and probably constitutes a record.

GREEN WOODPECKER (*Picus v. virescens*).—For some years I have been much puzzled by the abundance of fir cones which had every appearance of having been worked by Crossbills, and yet we neither saw nor heard the birds in the district. These cones were nearly always lying close to the trunk of the Scots pine, and on closer examination I discovered cones firmly fixed in clefts of the bark, some of which were natural, while others had been obviously enlarged for the reception of the cones.

On April 14th, 1922, while watching a pair of Wood-Larks, I saw a Green Woodpecker fly to the base of a Scots pine with a cone in its beak, and with the aid of powerful prismatic glasses, I distinctly saw it place the cone in position, *i.e.*, in an enlarged cleft in the bark, and immediately commence to attack it. As soon as the bird had flown away I inspected the cone, which still remained firmly fixed in the cleft, and found the work identical with that of the Crossbill, in fact on comparison it was impossible to distinguish between the two. I thus discovered a hitherto unrecorded, and probably quite a new habit of the Green Woodpecker, and at the same time cleared up a point which had for some time been a mystery. The note on the Crossbill in my previous Surrey field-notes (*antea*, Vol. XIII., p. 226) must in consequence be withdrawn.

The Great Spotted Woodpecker (*Dryobates m. anglicus*) is also in the district but is not so common as the Green Woodpecker, and I have no evidence that this new habit has been adopted by the former species.

I am firmly of the opinion that the habit is comparatively a new one, and has probably been brought about by the scarcity of insects during droughts. Maj. Smeed and Lieut. Dyson, together with myself, inspected several of the feeding places, two of which I discovered were decaying wire-fence posts, and the clefts had obviously been made by the birds; the ground underneath was strewn with cones which had been attacked.

WRYNECK (*Jynx t. torquilla*).—A comparatively rare bird in the county. I located a pair in 1923, breeding in a decayed birch stump.

CUCKOO (*Cuculus c. canorus*).—On June 6th, 1923, while crossing the common with the keeper, I heard the alarm note of a female Wood-Warbler in a copse composed of beech, birch and small oaks. As the keeper had never seen a nest, I suggested we should watch the birds. They were very wild, and the female refused to go back, though she alighted several times on a small oak branch which proved to be just over the nest. The nest, much to my surprise, contained a Cuckoo's

egg, with three of the Wood-Warbler's, and the birds had evidently been much disturbed by the visit of the Cuckoo. Bucknill includes it in his list of fosterers (*Birds of Surrey*, p. 167). Weight of Cuckoo's egg 210 mg.

On June 6th, 1923, Maj. Smeed in company with Lieut. Dyson were fortunate in finding a Cuckoo's egg with four of those of the Wood-Lark (*Alauda arborea*). The nest was placed in a tuft of fine grass. The foster parent's eggs are typical, and the Cuckoo's is a fine egg with greenish-grey ground, with conspicuous superimposed markings of brownish-black, its weight being 231 mg. This is I believe a new British record.*

On June 14th, 1923, a boy who was staying with the keeper found a Cuckoo's egg in the nest of a Wren (*Troglodytes t. troglodytes*). The boy had destroyed the eggs of the fosterer, and blown the Cuckoo's with a hole at each end. On June 22nd, the same Cuckoo deposited a second egg, in the second nest of the same pair of Wrens, which unfortunately met with exactly the same fate. I have only once during my forty-three years' field-work found the Wren used as a fosterer, and in this case the nest was deserted and no Wren's eggs were in the nest. The weight of the two Cuckoo's eggs was 241 mg. and 221 mg.

I plead guilty (as I fear most field-naturalists must) to having paid very little attention until this year (1923) to the position and condition of the nests in which Cuckoo's eggs have been found.

Owing to recent controversy I made up my mind that in future the fullest particulars should be carefully noted down at the time, and the above mentioned nest of the Wood-Warbler, and also those of the Wrens were carefully examined *in situ*. The entrance hole of the former measured 1 in. at its broadest, and those of the latter (in spite of the fact that they had been disturbed by the boy in extracting the eggs) $1\frac{1}{4}$ in. The Wood-Warbler's nest was situated in heather (not ling) flattened down, as is its characteristic when growing under trees. The hole was below the level of the heather and the nest was well tucked into a kind of pocket in it, and touched the ground, thus making it impossible for the Cuckoo to have placed herself in such a position as to lay the egg into the nest. The Cuckoo's egg was at the back of the nest behind those of the fosterer, none of which was fractured,

* This fosterer has been previously recorded by the late Frederick Bond and also by J. W. Clutterbuck, but with very scanty details and it is satisfactory to get the well authenticated instance quoted above.

which might well have been the case had the egg been dropped into the nest instead of having been carefully deposited by the beak. As regards the Wren's nests they were completely encircled by brambles, and I calculated that in neither case could the Cuckoo have placed the cloaca nearer than two to three inches from the nest, which precludes any possibility of the eggs having been deposited in any other way than by the beak, while the size of the entrance holes made it physically impossible for the Cuckoos to have gone on to the nests to lay. The above Cuckoos' eggs were exhibited at the October Meeting of the British Ornithologists' Club (see Bulletin No. CCLXXI., p. 20).

On May 13th, 1923, I found two eggs of a Cuckoo, obviously from their peculiar shape and similarity in other respects, the produce of the same female, in a nest of a Hedge-Sparrow (*P. m. occidentalis*). There were two eggs belonging to the fosterers. The Cuckoo's eggs weighed exactly the same, *viz.*, 252 mg. each. It is unusual to find two eggs from the same Cuckoo in one nest; I have two other records, and Maj. Smeed has a fourth.

May 29th, 1921, Cuckoo with four eggs of Red-backed Shrike; on June 5th I found the second nest of this pair of Shrikes, with two eggs and one of the same Cuckoo. Both nests were in white-thorn bushes, close to where I had previously found a Cuckoo using Shrikes' nests (*antea*, Vol. XIII., p. 115).

SHORT-EARED OWL (*Asio f. flammeus*).—I omitted in my previous notes to state that on March 26th, 1916, I saw a Short-eared Owl on one of our commons. It remained until April 15th, but I do not think it was a breeding bird.

MONTAGU'S HARRIER (*Circus pygargus*).—On April 9th, 1920, I had a close view of a male bird, putting it up twice. On the 11th this bird was again seen by Messrs. Borrer, Baynes and myself, and again by myself on May 1st and June 20th.

HEN-HARRIER (*Circus cyaneus*).—One was seen by the above mentioned observers and myself on March 26th, 1922. On May 13th, on another common, I saw a Harrier being chased by a Kestrel, but on this occasion was unable with any certainty to identify the species. On March 26th, 1922, I saw a male Hen-Harrier.

PEREGRINE FALCON (*Falco peregrinus*).—A fine male was shot in March this year by a keeper.

HOBBY (*Falco s. subbuteo*).—I have very little to add to my previous notes on this species. Since 1919 three further nests were located, and examined, all of which had belonged to Carrion-Crows, and were situated in Scots pines.

On June 18th, 1921, a clutch of four fresh eggs was found, three of them are of the reddish type, the fourth is a typical Hobby's. Owing to the fact that I had seen a Kestrel as well as the Hobby in the neighbourhood of the nest, which is a Hobby site, and also to the fact that there were *four* eggs, three of which were not altogether typical, I rather hastily attributed them to the Kestrel. I had no further opportunity to watch for the birds that day. When the eggs were shown to another collector he immediately suspected Hobby, and on a closer examination and a comparative study, I concluded that I had been deceived by the presence of the Kestrel, and that the eggs really belonged to the Hobby, and a further examination of the texture of the shells, together with the date and weights confirm the identification. Average weights four eggs 1.964 mg. Measurements, 38.2×32.4 , 38.4×33 , 38×33 , 39×33 mm. This is the second heaviest clutch of the Hobby I possess.

Messrs. Chance and Meares, who have both had considerable experience with the Hobby, agree with my identification of the eggs. Mr. Chance has a very similar clutch.

A fourth nest was located in the top of one of the largest Scots pines in the county, impossible to climb. One of the birds was screaming round the top of the tree while the keeper and I were underneath.

TEAL (*Anas c. crecca*).—Continues to breed in fair numbers.

STONE-CURLEW (*Burhinus æ. edicnemus*).—On April 4th, 1921, I put up a bird on the common.

WOODCOCK (*Scolopax rusticola*).—One seen on April 14th, 1923, numbers in 1920.

REDSHANK (*Tringa t. totanus*).—On June 16th, 1923, I flushed a Redshank from a nest containing four newly-hatched young, thus confirming my suspicions that they were breeding in 1918 and 1919. This is the second recorded instance of the Redshank breeding in the county. The date is very late for this species, probably a second attempt.

CURLEW (*Numenius arquata*).—A few pairs still breeding. Four eggs taken by boys in 1921 were distributed in the village.

GOLDEN PLOVER (*Charadrius apricarius*).—Small flock seen on March 25th, 1921, among young corn.

The cold early spring of 1923 was responsible for many fatalities among nestlings, and many eggs were frosted, migrants arrived and settled down on their respective territory, and as suddenly disappeared.

THE NEST-BUILDING AND OTHER BREEDING HABITS OF THE LONG-TAILED TIT.

BY

R. H. BROWN.

DURING the springs of 1922 and 1923 I had under observation seven pairs of Long-tailed Tits (*Egithalos caudatus roseus*) which were engaged in the process of nest-building. According to my observations on these pairs and also on others in Cumberland, most pairs commence building operations in March, and the process of nest-building consists of two parts, the actual building of the nest, and the lining of the nest with feathers. The work of building the nest is shared almost equally between the two sexes and occupies, on the average, nine days. The nest is then allowed to stand for two or three days, and then they start lining it with feathers. The lining of the nest is sometimes done by both sexes, but usually I found that, whereas both birds arrived at the nest together, only one carried a feather. I never found a bird carrying more than one feather at a time. This lining process occupies also, on the average, nine days. The bird that did the major share of the feather-carrying I took to be the female, as on arriving together at the nest its mate would drive away any birds found near it. Thus I have seen the Long-tailed Tit fighting with and driving away the Yellow Bunting and Blue Tit.

The fact that the seven pairs watched averaged eighteen working days for their nest-building seems to support Mr. A. Astley's theory that the birds have only a certain amount of energy to expend on nest-building (*antea*, Vol. XVI., p. 253).

The work of nest-building was carried on during the morning and early afternoon, and these birds were never found building after three o'clock (solar time). Whilst carrying materials, either moss, lichens, or feathers for the nest the birds keep up an incessant calling. When the nest is built in a bush preference is shown for one near a path. In this situation the nesting hole is usually situated in that portion of the nest furthest away from the path.

After the nest is lined with feathers it remains untended for a day or two, and then the eggs are laid, one each day until the clutch is complete, when incubation begins. Both birds roost in the nest at night, but I do not know yet whether both assist in incubation. I have never found the eggs during the laying-period to be covered with feathers, as

is the case with the Blue Tit sometimes. The usual clutch is 8-12 eggs, but I have found complete clutches of 5 and 6 eggs. Of two nests that I watched, the fledging period in both cases was 15 days, but the incubation period varied, being 14 days and 18 days respectively. Both parents feed the young, and the nest, just before the young leave, has often a dilapidated appearance. Once, in a nest of fledged young, I found two entrance holes, opposite one another.

My earliest date for a nest ready for eggs is March 29th, and earliest dates for full clutches are, April 8th (9 eggs) and April 15th (12 eggs). In Cumberland the average date for full clutches is the third week of April. I have found young just out of the nest on July 3rd, which points to two broods being occasionally reared.

NOTES

PINE-CONES AND WOODPECKERS.

MR. BUNYARD's observations, given on another page of this issue, on a Green Woodpecker attacking pine-cones, particularly interests me, as I saw a somewhat similar case last autumn (October 19th, 1923), in Spain. My wife and I were travelling in the provinces of Murcia, Granada and Almeria in south-east Spain, chiefly in search of birds, and in the pine-forests we were looking out particularly for Crossbills. At the foot of a mountain called La Sagra we found at the base of a few trees fresh cones with the scales slightly opened and having the peculiar frayed appearance which is immediately recognized as the work of Crossbills. On the trunk of one tree there were two cones jammed into the bark. As we could find no Crossbills I wondered then if Woodpeckers could have made the cones so exactly like those worked upon by Crossbills. The arrival of a Great Spotted Woodpecker (*Dryobates m. hispanus*) in a neighbouring tree seemed to confirm this idea, but on taking the two cones out of the bark I found that they were frayed and opened all round and not merely on the part which was exposed when they were fixed in the bark, moreover the cones were all fresh and many were lying on the ground well away from the trunk. Subsequently we saw a Crossbill near this tree and I came to the conclusion that the Great Spotted Woodpecker (Green Woodpeckers were very scarce in this forest and there were no Nuthatches) had picked up from the ground some of the cones dropped by the Crossbills and had jammed them into the bark, to extract either insects taking refuge in the opened cones or a seed or two overlooked by the Crossbill.

H. F. WITHERBY.

GREAT SPOTTED WOODPECKER IN N. LANCASHIRE.

ABOUT November 8th, 1923, a gamekeeper at Formby caught in a rabbit-trap an immature female Great Spotted Woodpecker. It is now in my collection, and I have submitted it to Mr. H. F. Witherby, who states that it is of the British form (*Dryobates m. anglicus*) and has nearly completed its moult to first winter. I believe this is a very rare visitor to this part of Lancashire and, as far as I know, is a new record for Formby.

THOS. L. S. DOOLY.

LARGE CLUTCH OF PEREGRINE FALCONS' EGGS.

THE following, taken from a Report on Lundy made by certain Jurors appointed by the Crown (to whom the island then belonged) in 1274, is quoted by the late J. H. Gurney in his *Early Annals of Ornithology*, p. 60 :—

"There is also one eyrie of lanner falcons, which have sometimes three young ones, sometimes four, sometimes more, and sometimes less."

From this it would appear that 650 years ago clutches of at least five eggs were accepted as something not very unusual.

LEWIS R. W. LOYD.

[Possibly the word "more" refers to the larger number (4) mentioned and "less" to the smaller number (3).—EDS.].

HEN-HARRIER IN LANCASHIRE.

ON December 3rd, 1923, a Hen-Harrier (*Circus cyaneus*) with a broken wing was found in Altcar, north Lancashire. It was an adult female.

THOMAS L. S. DOOLY.

WILD-FOWL AT STAINES RESERVOIR.

ON December 16th, 1923, I identified twelve species of water birds on the reservoir at Staines, Middlesex, viz.: Mallard (*Anas platyrhynchos*), Teal (*A. crecca*), Wigeon (*A. penelope*), Shoveler (*Spatula clypeata*), Pochard (*Nyroca ferina*), Tufted Duck (*N. fuligula*), Golden-eye (*Bucephala clangula*), Goosander (*Mergus merganser*), Smew (*M. albellus*), Black-headed Gull (*Larus ridibundus*), Great Crested Grebe (*Podiceps cristatus*) and Coot (*Fulica atra*). At the outside there were not more than thirty Great Crested Grebes present, so it would appear that the large numbers of this species which may be seen there at the end of the summer are chiefly migrants.

Mr. Holte Macpherson writes to inform me that he saw a Scaup (*N. marila*) on this reservoir on December 15th and on December 20th, in company with Mr. Rudge Harding, eleven Goosanders, two of which were old males.

The large numbers of birds which frequent this reservoir render it an important ornithological feature of a county which seems to be somewhat neglected, and it would be a satisfactory result if the interesting records which are being obtained from this sheet of water were to stimulate someone to become successor to Mr. Harting.

WILLIAM E. GLEGG.

GOOSANDERS IN MIDDLESEX.

ON December 8th, 1923, I saw four Goosanders (*Mergus merganser*), including one old drake, on one of the reservoirs at Staines. Records of Middlesex Goosanders are somewhat

scarce, though it will be recollected that a large flock was seen on these reservoirs in February, 1922 (*B.B.*, XVI., 25).

A. HOLTE MACPHERSON.

SHAG IN OXFORDSHIRE.

A SHAG (*Phalacrocorax a. aristotelis*) appeared at the end of August, 1923, on the Thames at Lower Shiplake, Oxfordshire. The bird perched on the roofs of boat-houses and for the space of two days was seen flying, swimming and diving. So far as is known it was not captured.

R. C. DAVISON.

GREAT CRESTED GREBE IN LONDON.

EARLY on a June morning in 1922 I saw a Great Crested Grebe (*Podiceps cristatus*) on the Serpentine. The bird seemed obviously uneasy. It kept to the middle of the lake and avoided all the other birds which commonly frequent that water.

R. C. DAVISON.

RUFF AND OTHER VISITORS AT SOMERSET RESERVOIRS.

DURING the autumn of 1923 I devoted considerable time and attention to observations on the waders and other birds visiting some of the Somerset reservoirs. I hope to have an opportunity of dealing more fully with these investigations at a later date, but in the meantime I think it desirable that certain of the more noteworthy occurrences should be placed upon record. These are as follows :—

RUFF (*Philomachus pugnax*).—Four observed during September at the Barrow Gurney Reservoirs, N. Somerset. A single bird in very grey plumage and undoubtedly an adult, on September 2nd. On September 23rd, three more, two adults, which from the disparity in size were evidently male and female, and an immature bird in the characteristic buff plumage. On September 24th at least two of them were there, and on September 25th there were still two, namely the female and the young bird. On September 30th only the latter was left, and by October 4th this also had passed on.

This result of a single season's watching is rather surprising when one reflects on the extreme paucity of recent records of the Ruff in Somerset. I suspect that careful and systematic observation at the reservoirs would show that it is less rare in the county than has been supposed.

CURLEW-SANDPIPER (*Calidris ferruginea*).—A little party of about eight or ten at the Barrow Reservoirs on September 24th. These birds, which I watched at close quarters, represented a

portion only of a flock of some 20-25 small waders which were feeding at the water's edge amongst the Gulls and Lapwings when I arrived. The rest went off before I had an opportunity of examining them, so that I am uncertain whether these were also Curlew-Sandpipers or merely Dunlin, but I believe that they were all the same. The remaining birds left in the course of the afternoon. There are few records of this species inland in Somerset.

GREENSHANK (*Tringa nebularia*).—One frequented the Barrow Reservoirs for a month in the autumn. I saw it first on August 26th, and for the last time on September 24th. By September 25th it had gone. Another at Litton Reservoir, September 22nd. This is the most frequent of the scarcer waders visiting the North Somerset reservoirs.

GREY PHALAROPE (*Phalaropus fulicarius*).—One at Blagdon Reservoir, September 6th. I watched this bird at extremely close range, and from its size I judge it to have been probably a male.

(?) SLAVONIAN GREBE (*Podiceps auritus*).—On October 8th I watched a Grebe on one of the Barrow Reservoirs which I believe to have been this species rather than the rarer Black-necked Grebe (*Podiceps n. nigricollis*). I could never get quite close enough to determine conclusively which species it was. Unfortunately I had to leave home on the following day, so could not return and examine the bird with a telescope as I should otherwise have done. B. W. TUCKER.

SPOTTED REDSHANKS IN SOMERSET.

ON September 5th, 1923, a Spotted Redshank (*Tringa erythropus*) was seen by us at Blagdon Reservoir, North Somerset, and was watched again by one of us (B.W.T.) on the following day. With glasses it was distinguishable from the Common Redshank (*T. totanus*), even at some distance, by its larger size, longer legs and greyer plumage, and in addition, at closer range, by the appreciably longer bill, distinct whitish eye-stripe and greyish-white, not pure white, underparts. On the wing the absence of any appreciable white on the secondaries and the highly characteristic dissyllabic note confirmed the identification. This note is quite unlike that of the common species and was written down on the spot as "tu-e" or "chew-e." In view of the diversity which is usual in renderings of bird-calls by different persons, we consider this a remarkably close approximation to Mr. Oldham's "tchuet" (*Brit Birds*, Vol. XII., p. 117, and *Pract. Handbk.*, Vol. II., p. 639).

The Spotted Redshank has always been considered a very uncommon visitor to the Bristol Channel area, and we know of no more recent record for Somerset than that of two young birds mentioned by the Rev. Murray A. Mathew in his Revised List of the Birds of Somerset (*Proceedings of the Somerset Archaeol. and Nat. Hist. Soc.*, Vol. XXXIX., 1893, p. 131), which were shot at Weston-super-Mare some years prior to 1893.

E. PAGE.

B. W. TUCKER.

I wish to add to the above note that on September 11th, 1923, I had a good view of another Spotted Redshank on the mud-flats close to Steart Island, near the mouth of the Parrett, on the Somerset coast. This bird was clearly identified by the unmistakable note and all the other characters above mentioned. The locality is only about sixteen miles from Blagdon. The probable inference to be drawn from these two observations is that a small party or larger number reached the Bristol Channel coast this autumn and became scattered. I have so far heard of no others in the West Country, but it was interesting to note that specimens have been recorded from Cheshire and Shropshire during the same season (*antea*, pp. 145 and 169).

B. W. TUCKER.

BLACK-WINGED STILT IN HAMPSHIRE.

A BIRD, which without doubt must have been a Black-winged Stilt (*H. himantopus*), frequented the neighbourhood of Beaulieu in the latter half of November, 1923. Major Cecil Paddon saw it on the 23rd and 25th, at rather long range, on the mud near Needs Oar Coastguard Station. "On the 26th," he writes, "it was on the gravel spit our side of the golf house and I crept up opposite to it on the old links—it would be about 120 yards away. As I had my glasses there was no possibility of mistaking it; there were a few Redshanks near it and it simply dwarfed them. The moment I saw plate 74 in Vol. II. of Coward's book, it was quite obvious as to what it was." Major Paddon also informed me that it was very long in the leg, with a small body, and looked very black and white. He has done a lot of wild-fowling, and during the last five years some bird-watching on the Norfolk coast, so that he knows the ordinary waders well, but had never seen a Stilt before.

THOMAS H. C. TROUBRIDGE.

THE NORMAL CLUTCH OF SANDWICH TERN'S EGGS.

WITH reference to Mr. Clifford Borrer's note (*antea*, p. 189) regarding clutches of three eggs of the Sandwich Tern (*Sterna*

s. sandvicensis), I pointed out in Vol. III., p. 169, that the average clutch at Ravenglass, Cumberland, was two.

In an article in *The Field* of January 1st, 1921, I gave the clutches of three as 1 per cent., those of two at 70 per cent., and those of one at 29 per cent.

During 1922 and 1923 I have visited a re-colonized nesting place in the north of England, and was pleased to find quite a fair number of full clutches of three and hardly any of one only. In one closely packed patch of nests, all two's or three's, there were several eggs turned out of the nests, which had evidently also been clutches of three. These eggs were, unlike the others, not incubated. It does not follow, however, that this third egg never hatches, for I have on more than one occasion found all three young and ringed them.

I think that the answer to the question why three's are so often seen in collections and not in the nests, is that these are the clutches that are taken for collectors.

The size of the clutch depends largely upon the food supply, for in Holstein, where this is very abundant, well over 90 per cent. of the Sandwich Terns have full clutches of three. Possibly this is where those seen in collections come from.

H. W. ROBINSON.

SCANDINAVIAN LESSER BLACK-BACKED GULL IN THE SCILLY ISLES.

ON May 20th, 1923, I saw at close range, a single specimen of *Larus fuscus fuscus* in the pool, St. Mary's, the Scilly Isles. It did not mix with the other Gulls and was in a very poor condition.

H. W. ROBINSON.

LATE STAY OF YELLOW WAGTAIL.—Mr. Lewis R. W. Loyd informs us that while standing outside a covert, by a small stream at Wells, nr. Frome, Somerset, on November 30th, 1923, an immature *Motacilla flava rayi* traversed the field close past him and was at one time no further away than twelve feet.

SCAUP-DUCK INLAND IN YORKSHIRE.—Mr. H. Spencer informs us that an adult female *Nyroca m. marila* was shot from a small flock on the River Calder at Elland, W. Riding, by Mr. A. Danks, on December 27th, 1923. Mr. Spencer kindly submitted the head of the bird for identification.

SMEWS IN BERKSHIRE.—Dr. Norman H. Joy reports that on January 3rd, 1924, Messrs. H. M. Wallis and J. L. Hawkins and he watched six *Mergus albellus*, two of them being adult males, on White Knights' Lake, Reading.



LETTERS



CUCKOO'S EGG IN CHAFFINCH'S NEST.

To the Editors of BRITISH BIRDS.

SIRS,—I was interested in Mr. B. W. Tucker's record (*antea*, p. 166) of a Cuckoo's egg having been found in the nest of a Chaffinch. A similar occurrence came under my notice during the nesting season of 1923, this being the second case of its kind during recent years by two different female Cuckoos. The two "defaulters" were, in my opinion, Hedge-Sparrow Cuckoos, this being based on the fact that in both cases the eggs were found on territories in possession of Hedge-Sparrow Cuckoos. In addition, two other Hedge-Sparrow Cuckoos in 1922 and 1923 deposited several of their eggs in nests of the Linnet and Greenfinch. In each instance there was actually a Hedge-Sparrow's nest in close proximity to the alien nests so used, and therefore we have proofs that a Cuckoo will make the fatal mistake of foisting her egg upon foster-parents which are unable to rear the young Cuckoo through unsuitable feeding. In 1922 a Greenfinch under notice allowed a young Cuckoo to die at a week old (*The Graphic*, No. 2769, Vol. CVI., recorded by my friend and associate, Mr. H. H. Turner), whilst in 1923 a Linnet, also under observation, lost a young Cuckoo at the same age, it being a mere skeleton. (This instance has not yet been recorded anywhere.) Further, no one has yet been able to locate a race of Linnet or Greenfinch Cuckoos. The mistake appears to be made by these Cuckoos in finding such nests during the building period and having once found them will not be put off. Being built in similar places and of like design the nests of the Linnet, Greenfinch or Hedge-Sparrow might easily be mistaken for each other in the building stages by the female Cuckoo, whereas the same mistake would be extremely unlikely in the case of a Cuckoo victimizing Reed-Warblers, Meadow-Pipits, or Pied Wagtails.

I cannot believe that such erratic behaviour on the part of Hedge-Sparrow Cuckoos is deliberate, and if such behaviour be accidental it would appear that some Cuckoos at least are yet undergoing adaptation. At all events it would appear that the instinct is, with some Cuckoos at any rate, not yet so ingrained that mistakes *cannot* be made.
CLIFFE AT HOO, ROCHESTER, 8th January, 1924. GEO. J. SCHOLEY.

To the Editors of BRITISH BIRDS.

SIRS,—With reference to Mr. B. W. Tucker's note on the above (*antea*, page 167), on May 31st, 1916, I found the egg of a Cuckoo in a Chaffinch's nest which contained one egg of the latter bird. Both eggs were partly incubated. The nest was in the centre of a remarkably thick hawthorn hedge adjoining an orchard near Orpington, Kent.
LONDON, W., January 1st, 1924. S. B. HODGSON.

THE OVIPOSITION OF THE CUCKOO.

To the Editors of BRITISH BIRDS.

SIRS,—The Cuckoo incident recounted below was described to me recently in the course of conversation by the Rev. Father Horne, of Downside Abbey, Somerset. By a very remarkable combination of

circumstances he was enabled many years ago to observe the act of oviposition with a minuteness which I imagine can hardly have been equalled even since Mr. Chance's initiation of the intensive method of studying the Cuckoo. He informed me that he had long contemplated putting the observation on record in print, and as a result of our conversation he very kindly sent me a written account of it with full permission to publish it. His letter is as follows :—

DOWNSIDE ABBEY,
STRATTON-ON-THE-FOSSE,
BATH.

May 5th, 1923.

DEAR MR. TUCKER,

The following is the account of what took place when I watched a Cuckoo lay an egg in a Pied Wagtail's nest : In the second week in May 1883, a Pied Wagtail had built a nest on the sill of a staircase window, in some ivy. The glass was in the form of diamond panes leaded together, and the window did not open, so that the nest could not be disturbed, nor reached at all, except from the ground with the help of a fairly long ladder. When the Wagtail's nest began to be built, I went to the window each morning at 9 a.m. and made notes on the progress of the construction and the egg-laying. When two eggs had been laid, on making my visit as usual, I found a Cuckoo sitting on the nest, with its tail-feathers spread out like a fan on the glass. By kneeling down on the floor, my eyes came exactly on a level with the nest, and only two or three inches away from it. After about two minutes or so, the Cuckoo raised herself up off the nest—I cannot say whether her feet were on the edge of the nest or outside it, as I was intent on watching the egg-laying. The long tail-feathers being raised well out of the way, flattened as they were against the glass, I had a perfect view of the bird's body, which appeared to elongate and to become almost pointed. This point was bent downwards, the bird standing above the nest and clear of it, and it almost seemed as though it felt about for the edge of the nest, for it moved from side to side. As soon as it touched the side of the nest, the egg began to be extruded, and when it finally left the bird it rolled to its place by the side of the other two eggs. The Cuckoo then settled down on the nest for about a minute, when it flew straight away and did not appear to look at the nest or egg before it left. It certainly did not take one of the Wagtail's eggs away with it, for they both remained in the nest after the Cuckoo had left.

I thought of taking the time, by my watch, of the exact egg-laying, but I decided not to take my eyes off the bird for a moment, and so I can only guess that from the Cuckoo raising herself up off the nest to the egg falling into its place was something under a minute.

(REV.) ETHELBERT HORNE.

I do not think that the scientific interest of this remarkable observation needs any emphasizing, but I should like to offer a few comments on one or two special points.

In connection with the actual laying I would direct particular attention to the description of the peculiar elongation of the body, which seemed "to become almost pointed," and to the evidently high degree of sensitiveness of the region round the cloacal opening. The possible bearing of this on the Cuckoo's procedure in introducing its egg into domed or awkwardly situated nests should not be overlooked.

I do not wish to suggest that all Cuckoos invariably lay directly in the nests of their victims. Having no first-hand experience in the matter I do not propose to rush into the controversy on this point, though I admit that I cannot believe that such a proceeding is possible in all cases. But the foregoing account does suggest that the Cuckoo is better equipped for introducing its egg directly into covered nests than other birds of its size would be. In the case of a Wren's nest, for example, if the Cuckoo hung on to the outside (*cf.* Mr. Musselwhite on this subject—*Brit. Birds*, Vol. XVI., p. 285, and *Bull. B.O.C.*, CCLXXXII.) I do not think it can be questioned that the peculiarly extensible and mobile character of the posterior extremity of the body, which the above observation indicates, would greatly facilitate the introduction of the egg through the comparatively small opening of the nest, and the evident sensitiveness of this region ("it almost seemed as though it felt about for the edge of the nest") is quite in keeping with this suggestion.

With regard to the removal or non-removal of an egg from the nest in the present case, it is not entirely clear from the expression "when two eggs had been laid" whether the two eggs were seen on the day before the Cuckoo laid or whether there was then only one egg and the other was only seen when the Cuckoo left the nest. If the former were the case, then, in view of the fact that many, if not most, birds lay in the early morning, it might be argued that a third egg had probably been laid before 9 a.m. on the day when the Cuckoo laid and that this had been removed before the observer arrived. I communicated with Father Horne on this point and he replied that he believed that the Wagtail did not lay so early as 9 a.m., but that in any case there was only one egg in the nest at 9 a.m. the day before. Thus it seems clear that the Cuckoo could *not* have removed an egg, because at whatever time the Wagtail laid there could not have been more than two of her eggs in the nest when the Cuckoo arrived and there were two when she left. It will be noticed also that this Cuckoo laid at a different time of day from Mr. Chance's Meadow-Pipit Cuckoos, which almost invariably laid in the afternoon. The evidence which is gradually accumulating is tending, I think, to show that the behaviour of Cuckoos is by no means as stereotyped as we are sometimes asked to believe.

B. W. TUCKER.

CHEWTON MENDIP, BATH.

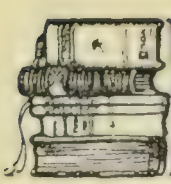
SHAG INLAND IN SOMERSET.

To the Editors of BRITISH BIRDS.

SIRS,—I wish to add a few particulars to one of the records in my recent note under this heading (*antea*, p. 169). I there state that a Shag was picked up exhausted at Shepton Mallet in October, 1906, and was "subsequently examined by the late Dr. J. Wigglesworth and Mr. Stanley Lewis." This information was derived from some of the MSS. notes on Somerset birds left by the late doctor. Mr. Lewis has very kindly given me some further details, but too late for incorporation in my original note. He informs me that the bird was seen alive by him at the time of its capture, and he examined and identified it in the flesh. It was only many years afterwards that he took Dr. Wigglesworth to see the stuffed bird. The words "subsequently examined," etc., therefore, apply strictly to Dr. Wigglesworth only, and the credit for preserving the record in the first instance is Mr. Lewis's.

CHEWTON MENDIP, BATH.

B. W. TUCKER.



REVIEWS



Guide to the Birds of Europe and North Africa. By Colonel R. G. Wardlaw Ramsay. (Gurney & Jackson.) 12s. 6d. net.

THIS useful little work is provided with a short memoir by Dr. W. E. Clarke of its author who died in April, 1921. In the preface we are told that Dr. Clarke has had the co-operation of Surgeon-Rear-Admiral Stenhouse in completing the work. Besides the regions mentioned in the title the N. Atlantic Islands are also included, but the line on the east has been drawn strictly, so that while we have many eastern forms which occur in Egypt, others, even so near as Palestine for example, are omitted, a disadvantage which must occur in a political as opposed to a zoogeographical region. Diagnoses of the order, family and genus are followed by the scientific name of the bird and its equivalent in English and other languages, and a very brief description and account of its distribution. If there is more than one form, similar but much briefer details are given of each. All this, so far as we have tested it, has been done on the whole satisfactorily and the plan adopted is clear and compact. The book is founded upon, but does not always follow, Dr. Hartert's great work *Die Vögel der paläarktischen Fauna*. As it is nowhere stated up to what date the work is brought it is difficult to see what has been done since the death of the author two and a half years ago, but we notice that subspecies described in 1921 after the author's death have been added, though others described in 1922 and 1923 have been omitted. On the other hand a change of name (*Phylloscopus inornatus* for the Yellow-browed Warbler) proposed as late as 1922 and not generally accepted, has been adopted, while many other changes proposed in 1922 and 1923 have been ignored. So that the work starts with the handicap of being some two years out of date. It is unfortunate at a time when we are reaching uniformity to find the Stints referred to *Tringa* and the Sandpipers to *Totanus*, Pallas's names in *Vroeg's Catalogue* (now universally accepted) rejected and above all the retention of *Turdus musicus* for the Song-Thrush, *T. iliacus* for the Redwing and *Anas boschas* for the Mallard. Yet the Orphean Warbler is called *Sylvia hortensis* and the other "nomina conservanda" of the B.O.U. List of 1915 are

not adopted, so that these names (all rejected in 1921 by the B.O.U. List Committee) are reduced in the present work from thirteen to three, which demonstrates the futility of a sentimental departure from rules.

A few of the points we have noted in consulting the work may be perhaps worth mentioning: *G. glandarius fasciatus* appears to be the form found in the whole of Spain and Portugal and not only in South Spain; that the Golden Oriole "breeds regularly in small numbers in S.E. and S.W. England" is, we are afraid, an unduly optimistic statement; we are not aware that *Emberiza schæniclus canneti* is known from Spain, though it is from Portugal; *Galerida theklae* certainly occurs as far north in Spain as the Gredos mountains; the Wood-Lark breeds in N.W. Africa and has been separated as *L. a. harterti*; the Long-tailed Titmouse of Tukey, Asia Minor and south-west Persia should be called *A. c. tephronotus*, of which *passekii* is a synonym; *A. c. alpinus* inhabits the south of the Caspian (this point seems also to have escaped Dr. Hartert in his various addenda, but see P. A. Buxton, *Journ. Bom. N.H. Soc.*, XXVII., No. 4, p. 114); to the distribution of *L. senator badius* should be added the Balearic Islands, where it is common; we should be interested to have evidence for the statement that the White-tailed Eagle breeds "south to the Pyrenees"; there is no proof of the Bean-Goose occurring in Iceland or Greenland, nor of the Pomatorhine Skua breeding in Spitsbergen.

Although the work would have been more valuable if it had been brought up to a stated date we can recommend it for its purpose as a "guide" of a most useful kind. H.F.W.

Game-Birds and Wild-Fowl of Great Britain and Ireland.

Written and illustrated by A. Thorburn. With 38 plates in colour. Imperial 4to. (15" × 11"). (Longmans.) 1 vol. £5 5s. net.

DURING recent years Mr. Thorburn has given us some beautiful books, but we think this excels them all. Each plate is not only a good representation of the bird but in most cases a perfect picture as well. The pictures of the game-birds are perhaps the best, though it is difficult to choose between these and some of those of the Ducks. In a book of this kind Mr. Thorburn might have omitted some of the Ducks which have very rarely indeed occurred in this country and substituted more usual wild-fowl, such as Godwit, Whimbrel and Knot. But it would have been hard for such a master of

colour as is Mr. Thorburn to sacrifice the brilliance of the King and Steller's Eider for instance, for the sombre Whimbrel. We think, however, that the Land-Rail, a bird that figures on the game-list, ought to have been given a place. There is indeed very little to criticize in Mr. Thorburn's work; the bills of the Grey Lag and White-fronted Geese are perhaps too deep a colour, and we might remind the author that Howard Saunders's *Manual*, which he follows in nomenclature, was published a quarter of a century ago and is consequently entirely out of date. But the latter is a point of no great importance in a book of this kind in which the letterpress, as in Mr. Thorburn's other works, is quite subservient to the plates. It is indeed for the beauty and excellence of its plates that we can heartily commend the book, and those who acquire a copy will find these pictures a source of pleasure which will not fail however many times they are looked at.

H.F.W.

Birds and their Young. By T. A. Coward, M.Sc., etc. Illustrated by Roland Green. (London, Gay and Hancock, 1923.) 10s. 6d. net.

THIS is an attractive book with 12 coloured plates and 32 pen and ink studies of birds by Mr. Roland Green, and belongs to a distinctly higher class than the other works in the same series already issued. The letterpress is written in a simple and clear style and should not be beyond the comprehension of an intelligent schoolboy, but at the same time it is a serious study of the life of the bird—not compiled from an imperfect acquaintance with the literature of the subject alone, but based on a very sound practical knowledge of most of our native birds. Occasionally one comes across cases where a wider view of bird-life would have led to some modification of the statements made by the author. For example, it is stated (p. 21) that Cormorants "occasionally build bulky nests in trees." There must be many scores of such nests built annually in Ireland at four different breeding stations: that at Lough Attymas in Sligo alone is described by Ussher as containing 70 or 80 nests. Within a few hours' run of the English coasts last spring I could see at least 500 such nests from one spot, and we estimated the total number of nests in the colony at well over 1,000, while on the lower Danube thousands of such nests can be seen in the flooded willow trees. The assertion that Rooks will not venture to steal Herons' eggs if there are any Herons on guard is misleading. One large Heronry of over 70 nests was so persistently raided by Rooks, that in one season only a single pair on an outlying tree succeeded in bringing off their young, and after vain struggles for several years the colony was finally abandoned altogether by the Herons. The Green Sandpiper's habit of laying in nests of other species in trees is shared by at least two other species on the British List (p. 21).

With the exception of the Kittiwake, where the situation of the nest renders it impossible for the young to move any distance, the young of most Gulls show a very pronounced tendency to leave the nest at an early period and take cover wherever available.

The question of the moult in birds seems to be rather inadequately treated and might with advantage have been elaborated.

We are glad to see that Mr. Coward admits that the egg "has much to teach and we have much to learn," but if the study of eggs has to be accomplished *without specimens*, as he advocates, it is quite obvious that only an infinitesimal number of students will ever have the opportunity to pursue the study or even to become acquainted with its simplest elements. A more scientific view would be to admit freely that the taking of a few clutches early in the season has no effect whatever on the status of birds—as they are in almost every case replaced after an extraordinarily short interval.

The coloured plates are a credit to the artist, and we are glad to see that Mr. Green's work improves. Many of the black and white studies are very effective; occasionally, as in the sketch of the Dipper's nest or the Brown Owl and young, there are signs of imperfect acquaintance with the wild bird, but other sketches are extremely life-like. Bird artists are so few that we are glad to welcome one of such promise as Mr. Green.

F.C.R.J.



STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS,

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND.



TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.

F. H. L. WHISH,
LYMPHAM, SOMERSET.



Kilimanjaro and its People

A History of the Wachagga, Their Laws, Customs and Legends. By the HON. CHARLES DUNDAS, O.B.E. (Senior Commissioner Tanganyika Territory). Demy 8vo., numerous photographs, **18/- net**

The Peaks, Lochs and Coasts of the Western Highlands

Penned, and Pictured with one hundred photographs, by ARTHUR GARDNER, M.A., F.S.A. Demy 8vo., **15/- net**

White and Black in East Africa

By HERMANN NORDEN, F.R.G.S., Author of "From Golden Gate to Golden Sun." Demy 8vo. Photographs and maps, **15/- net**

Deer Stalking in Scotland

By ALEXANDER I. McCONNOCHIE, F.Z.S., Author of "The Deer and Deer Forests of Scotland," etc. With an Introduction by The DUKE OF ATHOLL, K.T. Demy 8vo. Illustrated, **10/6 net**

The Birds of Portugal

By WILLIAM C. TAIT, F.Z.S., M.B.O.U. Demy 8vo., with photographs and a map in colours, **18/- net**

The Bird as a Diver

A contribution to the Natural History of Diving Birds. By JOHN M. DEWAR, M.D. Demy 8vo., **10/6 net**

The Literature of the Charadriiformes

From 1894 to 1924. By G. C. LOW, M.A., M.D., M.R.C.P., F.Z.S., M.B.O.U. Demy 8vo., **12/6 net**

A Check-List of British Birds

Compiled from "A Practical Handbook of British Birds," by H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U. Demy 8vo., Paper covers 3/- net. Stiff Boards, **3/6 net**

Vivarium and Aquarium Keeping for Amateurs

A Practical Guide to the Hobby. By A. E. HODGE, F.Z.S. Crown 8vo., with photographs, and text illustrations, **5/- net**

The Irish Setter

Its History and Training. By COLONEL J. K. MILLNER. With an Introduction by S. W. CARLTON. Crown 8vo., with photographs, **5/- net**

A Romance of the Rostrum

Being the Business Life of Henry Stevens, and the History of Thirty-Eight King Street, with some accounts of Famous Sales held there. Compiled by E. G. ALLINGHAM, with a Preface by The Right HON. LORD ROTHSCHILD, F.R.S. Demy 8vo., with photographs, **20/- net**

Bird Room.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

MARCH 1.
1924

Vol. XVII.
No. 10.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

THE MAGAZINE YOU HAVE BEEN LONGING FOR.

"It is the kind of Nature Magazine we have been wanting for some time."—
Westminster Gazette.

"We wish Dr. Renshaw every success."—*Ibis.*

VOLUME III. JUST COMMENCING.

Better write at once for Illustrated Prospectus from the Editor,

DR. GRAHAM RENSHAW, SALE, MANCHESTER.

W. F. H. ROSENBERG,

Naturalist & Importer of Exotic Zoological Collections

Head Office and Museum of Bird Skins and Exotic Lepidoptera, etc.,

57, HAVERSTOCK HILL, LONDON, N.W.3.

PRICE LISTS—Birds' Skins (5,000 species),

Exotic Lepidoptera (8,000 species)—Post Free.

Branch Establishment for the supply of Entomological and other Natural History
requisites, books, and specimens—

25, CROMWELL PLACE, LONDON, S.W.7.

(Near the Natural History Museum.)

Price List of Apparatus Post Free.

Messrs. LONGMANS' LIST.

A NATURAL HISTORY OF THE DUCKS

By JOHN C. PHILLIPS, Associate Curator of Birds in the Museum of
Comparative Zoology, at Harvard College

With 20 Plates in Colour and 6 in Black-and-White, from Drawings by
Frank W. Benson, Allan Brooks, Louis Agassiz Fuytes and Henrik Gronvold,
and 38 Maps.

Volume II. "The Genus *Anas*." 4to. £10 10s. net

BIRDS IN LEGEND, FABLE, AND FOLK-LORE

By ERNEST INGERSOLL.

With Frontispiece. 8vo. 12s. 6d. net.

"No bird-lover can afford to ignore so picturesque a collection of anecdotes."
Daily Telegraph.

THE NATURAL HISTORY OF SOUTH AFRICA: BIRDS

By F. W. FITZSIMONS, F.Z.S., F.R.M.S., etc., Director, Port
Elizabeth Museum.

With 10 Plates in Colour and numerous Illustrations from Photographs, etc.
Two Volumes. Crown 8vo. 12s. 6d. each.

LONGMANS, GREEN & Co. 39 Paternoster Row, London, E.C.4.

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 10, VOL. XVII., MARCH 1, 1924

	PAGE
Field-Notes from Cumberland. By R. H. Brown	222
Manx Ornithological Notes, 1923. By P. G. Ralfe	229
The "British Birds" Marking Scheme. Progress for 1923. By H. F. Witherby	231
Recovery of Marked Birds	236
Notes :—	
A Feeding Habit of the Hooded Crow (T. G. Powell) ...	243
Nest-Building Habits of the Long-tailed Tit (R. P. Gait and Coldstream Tuckett and Clemence M. Acland) ...	243
Willow-Warbler's Nests and Cuckoo's Egg (G. W. Thompson)	244
Blackbird Feeding on Grain (R. H. Brown)... ..	245
Woodpeckers and Pine-Cones (H. G. Alexander and R. E. Coles)	245
Unusual Flight of a Kestrel (R. H. Brown)... ..	247
Nestling of Rock-Dove (John Walpole Bond)	247
Ruff Wintering three times in Lancashire (H. W. Robinson)...	248
Common Sandpiper in Westmorland in Mid-Winter (J. F. Peters)	248
Spotted Redshanks in Somerset (E. Richmond Paton) ...	248
Roseate Tern Breeding in Cumberland (Rev. E. U. Savage)...	249
The Normal Clutch of Sandwich Terns' Eggs (Clifford Borrer)	249
Short Note :—	
Tawny Owl preying on Little Grebe	250
Letters :—	
Nest Materials of Pied Flycatcher (Major W. M. Congreve) ...	251
Cannibalistic Propensity of a Redbreast (Major W. M. Congreve)	251
Wrynecks in Surrey (Clemence M. Acland)	251
Two Young Cuckoos fed by the same Pied Wagtail (T. G. Powell)	252
Cuckoos' Eggs in Domed Nests (D. W. Musselwhite)... ..	252

FIELD-NOTES FROM CUMBERLAND.

BY

R. H. BROWN.

THE following notes on breeding-habits are based on observations extending over several years, otherwise all the notes are derived from observations made during 1923.

CARRION-CROW (*Corvus c. corone*).

The nest is built in March, both birds assisting in the building. Usually a new nest is built each year. Once a pair began relining an old nest but deserted it without laying any eggs. Another pair began building their nest in an alder, but after building the framework left it, and built in another alder about a hundred yards distant from the original nesting-site. Occasionally I find clutches of three eggs, perhaps the product of old birds. My earliest date for a clutch (four eggs) is April 12th. Incubation commences with the first egg laid, so that all the eggs do not usually hatch on the same day. In my experience only the hen incubates. The average incubation-period is nineteen days, but in one case, a clutch of four eggs, the period lasted until the twenty-fourth day on which day all the eggs hatched. I have another instance of a clutch of five eggs, incubation-period unknown, hatching on the one day.

Generally all the young hatched are reared, and in this respect the Carrion-Crow differs from the Rook (*C. frugilegus*).

The young on hatching have a flesh-coloured skin (covered slightly with black down) that begins to turn black from the fifth day onwards and is entirely black by the tenth day. Nestling Rooks are black skinned from hatching. The inside of the mouth of the nestling Crow is yellow on hatching, which turns to a deep pink by the fourth or fifth day. Occasionally there are two or three white spots within the lower mandible. The nestlings are blind until the fourth or fifth day.

The young Crows are very noisy for the first fortnight, and can often be heard calling out for food when one is some distance from the nest-tree. Afterwards they learn the necessity for silence. Until they commence feathering the young lie with their heads towards the centre of the nest; afterwards they sit with their heads towards the outside of the nest, their beaks on the nest-rim (a similar position in the nest is adopted by fledged Goldcrests (*Regulus regulus*)).

In *A Pract. Handbook of British Birds*, I., p. 15, the fledging period is given as "33-34 days (S. E. Brock)." Two nests

which I observed, the young left on the twenty-sixth and twenty-seventh days respectively after hatching.

ROOK (*C. f. frugilegus*).

On April 10th I examined the nests in a rookery near Dalston. With one exception they contained either newly-hatched young or hard-set eggs. The exception was a nest containing one fledged young one. The eggs in this nest must have been laid during the last week of February.

MAGPIE (*Pica p. pica*).

Three weeks or longer will often elapse between the completion of the nest and the deposition of the first egg. In the neighbourhood of Silloth I frequently found nests lined with the twine that is used on the self-binder for tying the corn-sheaves. I have also found paper in the lining of the nest, and twice have found a nest lined with horse-hair instead of fibrous roots. The clutches I most commonly find are three, four, and seven. My usual experience is that incubation does not commence until the clutch is laid, the bird covering the eggs at night. However, in a nest found when the seven young were about ten days old, four of the nestlings were considerably larger than the others, suggesting that in this case incubation had commenced before the clutch was laid. The young are very noisy and even when feathered will squawk loudly on being handled. The fledged nestlings have the inside of the mouth purple. The fledging-period is twenty-four to twenty-seven days. On leaving the nest the young still have short tails, which apparently hinder them flying any distance, as they skulk about the undergrowth and bushes, fed by their parents, until their tails have assumed their full length.

In July and August what I take to be family parties are seen fighting, evidently the parents driving away the young. During the autumn months the Magpie is partly parasitic on sheep, examining their fleeces for insects. They also perform the farmer a useful service in scattering the droppings of beasts whilst searching such dung for insects. The largest flock I have seen going to roost on a winter's night consisted of thirty-one birds.

GREENFINCH (*Chloris c. chloris*).

A flock of 230-250 birds on November 21st in a hedge adjoining a stubble-field, where the corn was still out, at the base of the Uldale Fells (elevation 900 feet) may have been home-bred birds attracted by the food supply, but on the other hand may have been immigrants. A fact of interest was that two males were seen apparently feeding their

females. The female opened her beak and the male placed his beak inside, the female fluttering her wings previous to and during the male's action.

On December 9th a male Greenfinch was seen apparently feeding its female.

Two Greenfinches were watched feeding on the seeds out of the berries of the wild-rose (*Rosa canina*) on December 26th, the ground being frozen and covered with snow.

LINNET (*Carduelis c. cannabina*).

In a fir plantation beside the Whinlatter Pass on August 11th I watched for some time a small flock of Linnets attacking the fir-cones. They were pulling the scales off the cones, but whether in order to feed on the seeds or possible concealed insects, I could not say.

YELLOW BUNTING (*Emberiza c. citrinella*).

On September 21st I found a nest of this species near Thurstonfield containing one nestling about four days old. On September 17th, 1916, a nest was found near Wetheral with two partly-fledged young.

In August the young are occasionally fed on Crane-Flies (*Tipula paludosa* or *T. oleracea*).

SKYLARK (*Alauda a. arvensis*).

A nest on Burgh marsh on June 16th held five eggs.

GREY WAGTAIL (*Motacilla c. cinerea*).

In my experience this species often rears a second brood, which is sometimes still in the nest in the third week of July.

BLACKCAP (*Sylvia a. atricapilla*).

On July 4th I was watching a Blackcap singing, and three times the bird repeated the song of the Common Whitethroat (*S. c. communis*).

WHITETHROAT (*Sylvia c. communis*).

On May 27th I put a bird off six eggs, and have another record of a similar clutch.

FIELDFARE (*Turdus pilaris*).

On November 10th from 11.30 a.m. until 3.30 p.m. there was a steady succession of flocks of Fieldfares flying across the Solway Firth, leaving the Cumberland side between Silloth and Skinburness, and heading north and north-west. Some of the flocks did not exceed thirty individuals in number, other flocks contained over one hundred, and between the passage of the various flocks there were generally a few stray birds, which seemed to be acting as connecting links between the various flocks. Some were flying at a good height, almost invisible to the naked eye, others no more than eighty feet

up. All were calling incessantly. Some of the flocks alighted for a time in a hedge near the shore before proceeding across the Firth. A Kestrel (*Falco t. tinnunculus*) made a sally into one of the flocks but I never observed it catch a bird. The day was sunny, with no wind. The sharp frosts and snowfall of the week previous must have driven these birds from the higher lying regions of Cumberland towards the Scottish lowlands.

WHINCHAT (*Saxicola r. rubetra*).

The breeding pairs and young left the neighbourhood of Cumdivock during August. On October 9th a bird of the year appeared at Cumdivock and stayed until October 13th.

STONECHAT (*S. torquata hibernans*.)

I have found this bird breeding amongst the heather on Cumrew Fell (E. Pennines) and on Carrick Fell (Lake Mts.) at an elevation of 1,100 feet and 1,300 feet respectively.

REDBREAST (*Erithacus rubecula melophilus*).

I have one record of this species covering its eggs during the laying-period. The nest was in a bankside and on April 18th contained four eggs. The night of April 18th-19th was frosty, and at 7 a.m. on 19th the eggs, still four in number, were completely hidden by oak-leaves, which I had to move aside in order to see the eggs, and then replaced. About noon on the 19th there were five eggs, and the oak-leaves had been removed. I find the fledging-period to be eleven to thirteen days (observations on six nests).

WREN (*Troglodytes t. troglodytes*).

My observations on the breeding-habits of the Wren, so far as they go, confirm the statements recorded by Mr. A. H. Machell Cox in *Brit. Birds*, XV., pp. 293-294. In 1922 a pair built a nest in the barn beside our house, building it entirely of straw, and then the nest stood about five weeks before it was lined and the eggs deposited. I have two more records of delayed laying, but in all cases the feathering of the nest was immediately followed by the deposition of the eggs. In looking through my notes I find the usual clutch to be six eggs, with three, four, and five fairly common. Clutches of seven and eight eggs I have only found once. The young do not roost in the nest after fledging, and one night just at dusk I put three young Wrens out of a used Chaffinch's nest. I invariably find that both parents feed the young.

DIPPER (*Cinclus c. gularis*).

I have heard this bird singing in every month of the year, and for as long a period on a cold afternoon in November as

on a hot July morning. In *A Pract. Handbook of British Birds*, I., p. 501, the clutch is given as "4-5, sometimes 6." Personally I find as many clutches of six eggs as of four and five, and frequently find clutches of three for the second brood. My experience is that the Dipper only rears two broods in the year.

Wm. Duckworth, in a paper on the Dipper in the *Transactions of the Cumberland Association*, 1878-1879, states that he never found a clutch exceeding five eggs, and in his opinion the birds only breed twice in the season.

The earliest dates I have for clutches are, March 17th four eggs, and March 24th six eggs.

Once, on disturbing a Dipper off its eggs, the bird dived into the stream and swam underneath the surface for some distance before coming to the surface beside a stone, whence it took flight.

SHELD-DUCK (*Tadorna tadorna*).

The young in down of this species, and also of the Oystercatcher (*Hæmatopus o. ostralegus*), on being pursued and coming to water, will dive underneath and swim under the surface, the downy Sheld-Ducks for some distance. The nestling Oystercatchers use their wings in swimming under the water, but I do not know whether the young Sheld-Ducks do so. The Sheld-Ducks in down have the bills coloured dark grey, their legs and feet blue-grey.

BLACK-NECKED GREBE (*Podiceps n. nigricollis*).

On November 10th I observed one for some time diving and swimming in the Solway estuary about twelve feet from the edge of Skinburness marsh. The bird was in winter dress and was identified by its upturned bill and the black of its head extending below the eye. On one occasion it brought up and ate a small fish. Other Cumberland records are, one at Allonby in February, 1922, and one on the Solway in August, 1912 (*Trans. Carlisle N.H.S.*, III., 1923).

WOOD-PIGEON (*Columba p. palumbus*).

On August 27th I found a Wood-Pigeon brooding a fledged nestling and cooing loudly.

In *A Pract. Handbook of British Birds*, II., p. 479, the colour of the bill of the Wood-Pigeon is described as "pink, tip yellowish to dull white." In live specimens which I have examined, the colour of the bills was as follows:—NESTLING ("down" and fledged). Basal part blue-grey; central portion light grey, shading into cream-white; tip horn-coloured. ADULT. Basal part pink; rest of the bill yellow; tip horn-colour.

WADERS' METHOD OF OBTAINING WORMS.

In the autumn of 1923 I watched both the Redshank (*Tringa t. totanus*) and the Dunlin (*Calidris alpina*) jumping with both feet several times in succession on the soft ooze and then probing with their bills the places where they had been jumping.

PURPLE SANDPIPER (*C. s. striata*).

One observed swimming and wading in the estuary off Grune Point, Skinburness, on November 10th. One feeding in the same muddy creek-bottom on Burgh marsh on November 16th and 27th. Both these birds rested, with bills hidden amongst the scapulars, within six yards of where I stood. Another on Burgh marsh on November 27th. This species is considered scarce on the upper Solway, the coast not being rocky, and according to Macpherson (*Vert. Fauna of Lakeland*, 1892), it has never been shot on any of the salt marshes.

GREY PHALAROPE (*Phalaropus fulicarius*).

Two birds seen swimming in the Solway Firth bordering Burgh marsh on October 13th. They were very tame, and on being disturbed by some Redshanks flew about just above my head and then settled down on the water again. On October 25th a flock of five was seen on the same marsh consorting with Dunlins. They were wild compared with the other two, and were calling frequently, a loud twittering whistle. The heavy south-west gales experienced during the first fortnight of October no doubt brought these birds to the Solway. Last recorded for Cumberland at Silloth in December, 1908 (*Trans. Carlisle N.H.S.*, III., 1923).

CURLEW (*Numenius a. arquata*).

Howard Saunders states (*Manual*, 2nd edn.) that this bird "has often been seen to perch on tall trees." I have only twice seen it do so, both times in the spring, and on each occasion the bird had been uttering its mating-song, and on the completion of its volplane downwards on motionless outspread wings, landed in a tree, but did not perch for more than half-a-minute.

In the late autumn, and especially during the prevalence of frosty weather, the Curlew occasionally visits its breeding-grounds. Thus on November 26th four were in a grass-field beside Nether Welton (10 miles from the nearest part of the Solway) where they breed. On December 5th and 31st three near Dalston (8 miles from the Solway). On December 1st one passed over Cumrew (base of E. Pennines) coming from the fell above the village.

GREAT SNIPE (*Capella media*).

On November 19th, a warm sunny day, I was crossing Hawksdale Common when a large Snipe, probably of this species, rose almost under my feet. As it flew away its tail appeared half expanded and showed a conspicuous amount of white. It continued on a straight course, without any zig-zagging, for about eighty yards, not flying very fast, and then gradually mounted into the air. When a moderate height up, it zig-zagged once, then pursued its straight flight and finally disappeared from sight in a westerly direction. It did not call.

LITTLE TERN (*Sterna a. albifrons*).

Each year I pay visits to two breeding-colonies on the coast. Whilst most of the eggs are laid amongst the shingle, a small number of clutches are found in depressions in the bare sand. Of the nests on the shingle, the majority contain no nesting materials whatever, but usually I find a certain proportion of nests each year in which the eggs are deposited on a layer of white sea-shells. One nest examined contained three small pieces of wood.

The earliest date I have found eggs is May 24th, 1921 (nests holding two eggs and one egg).

A fact I have never seen mentioned, is that the Little Tern will hover with a fish in its beak above its sitting mate or its young before descending to the ground.

LESSER BLACK-BACKED GULL (*Larus fuscus affinis*).

On June 29th I found a nest containing four eggs.

LAND-RAIL (*Crex crex*).

One craking early morning and evening up to and including August 2nd.

PARTRIDGE (*Perdix p. perdix*).

I put one out of a tree just at dusk on November 17th. Macpherson and Duckworth in their *Birds of Cumberland* (1886) give two instances of the Partridge perching.

MANX ORNITHOLOGICAL NOTES, 1923.

BY

P. G. RALFE.

THE following notes are intended to continue the record in *British Birds*, Vol. XVII., p. 17.

RAVEN (*Corvus c. corax*).—In 1923 Mr. J. D. Clague found a nest in an unexpected situation on an abrupt cliff of the sand and clay “brooghs” of the northern coast. It was very inaccessible, about half way (some 50 feet) from the top, and of the usual type of structure.

CARRION-CROW (*Corvus c. corone*).—In 1923 Mr. F. S. Graves discovered a Carrion-Crow evidently nesting on the cliffs of Peel Hill under the “Holy Well,” its mate (the male) was a Hooded Crow (*C. c. cornix*). For several weeks in April Mr. Graves had the pair under his observation. On November 27th he again saw and heard a Black Crow, perhaps the same, on Peel Golf Links.

It may be remarked that about sixty years ago the late J. M. Jeffcott stated: “An intelligent yeoman . . . also assured me that he had known a Hooded Crow to pair with a Black Crow; they had nested in a plantation close to his house, and the eggs had been hatched by the *black* bird. . . Carrion Crows had not been supposed to exist at all in the locality.”

BRITISH LONG-TAILED TITMOUSE (*Ægithalos caudatus roseus*).—Twenty to thirty were seen in Laxey Glen, November 25th, 1923 (Col. Madoc).

WOOD-WARBLER (*Phylloscopus s. sibilatrix*).—In 1923 Col. Madoc heard its song at Greeba, at Laxey, and (a passing bird only) at Parkfield, Douglas.

BLACKCAP (*Sylvia a. atricapilla*).—On May 29th, 1923, Col. Madoc saw a male and female, and heard the song, close to Ramsey.

WHINCHAT (*Saxicola r. rubetra*).—In May, 1923, Col. Madoc saw two pairs in the neighbourhood of Laxey, but doubts their remaining to breed.

KINGFISHER (*Alcedo a. ispida*).—I learn from Mrs. Sugden, of Ramsey, that about thirty years ago her brother, the late H. H. Spencer, found a nest with eggs in the “broogh” of the Sulby River, west of Ramsey. Though there could be little doubt of the nesting of the species in Man, this, so far as I know, is the first positive record. About three years ago Mrs. Sugden, whose house is close to the locality, saw an old bird there with two young.

SHORT-EARED OWL (*Asio f. flammeus*).—In 1921 Mr. M. McWhannell saw a nest in the Curragh land behind Ellanbane, Lezayre, with two eggs. Both the parent birds had been shot.

EAGLE (? *sp.*)—Some interesting reminiscences of the former nesting of Eagles have been communicated to me. Mr. S. T. Gelling, of Braddan, learned of an eyrie in the rocks of Greeba Mountain from his father, who was born in 1800, and about 1817-19 lived at Rhenscault in West Baldwin. From there he went with a friend and a young dog to take an eaglet from the nest. The bird, however, retreated into a crevice where they could not follow it, and as the dog would not face it, and the old birds made repeated attacks on them, and especially on the dog, they gave up the attempt.

Mr. T. L. Lace, of Wigan, says that his mother, who lived at Foxdale, but often visited relatives at a farm just under Greeba Mountain, also knew of the nesting of Eagles there, probably as late as 1835. Greeba is about five miles inland, but it would perhaps be rash to conclude that these birds were *Aquila chrysaëtus*.

GREENSHANK (*Tringa nebularia*).—For some weeks in February and March, 1923, three Greenshanks frequented the low rocks and tide-pools on the west of Langness. At least one bird reappeared there in November and December.

HERRING-GULL (*Larus a. argentatus*).—After various rumours of the inland nesting of this species, Mr. W. E. Cottier in May, 1923, found a number of birds frequenting a glen in the centre of the Island, and found two nests, one with eggs, placed among stones on the slopes of the valley about 750 feet above sea level, and four miles from the nearest salt water. Mr. Cottier thought that the birds here lived on young rabbits, which were extremely abundant, and whose bones were found in the Gulls' castings. In the same district Col. Madoc was shown two nests, much higher on the central moors, one situated amid heath and one on stony ground.

LITTLE AUK (*Alle alle*).—A specimen killed about twenty years ago on board a Peel fishing-boat has been given to the Manx Museum by Mr. S. Morrison.

THE "BRITISH BIRDS" MARKING SCHEME.*

PROGRESS FOR 1923.

BY

H. F. WITHERBY.

It is with very great pleasure that I have to report that the number of birds ringed in 1923 was a very large increase on that of 1922 and has been exceeded only twice in pre-war years. For this most satisfactory result everyone concerned is to be heartily congratulated. The following are the totals :—

NUMBER OF BIRDS RINGED.

In 1923		.. ..	12,866
In 1909	..	2,171	In 1916 .. 7,107
„ 1910	..	7,910	„ 1917 .. 6,926
„ 1911	..	10,416	„ 1918 .. 5,937
„ 1912	..	11,483	„ 1919 .. 3,578
„ 1913	..	14,843	„ 1920 .. 5,276
„ 1914	..	13,024	„ 1921 .. 8,997
„ 1915	..	7,767	„ 1922 .. 9,289
Grand Total		.. ..	127,591

Mr. Mayall again heads the list of ringers with a wonderful total of two thousand, two hundred and twenty-four, which is not far short of Dr. Moon's 1914 record of two thousand, five hundred and twenty-one. Mr. Mayall's total is made up of no less than forty-two species, almost all Passeres, the largest numbers ringed being Starling (317), Song-Thrush (304) Blackbird (254), Chaffinch (166), Robin (166), House-Martin (161), Linnet (150), Swallow (130), and Greenfinch (120).

* For previous Reports see Vol. III., pp. 179-182, for 1909; Vol. IV., pp. 204-207, for 1910; Vol. V., pp. 158-162, for 1911; Vol. VI., pp. 177-183, for 1912; Vol. VII., pp. 190-195, for 1913; Vol. VIII., pp. 161-168, for 1914; Vol. IX., pp. 222-229, for 1915; Vol. X., pp. 150-156, for 1916; Vol. XI., pp. 272-276, for 1917; Vol. XIII., pp. 96-100, for 1918; Vol. XIII., pp. 237-240 for 1919; Vol. XIV., pp. 203-207, for 1920; Vol. XV., pp. 232-238, for 1921; Vol. XVI., pp. 277-281 for 1922.

Dr. Moon, who is again second to Mr. Mayall, has also largely increased his total over that of 1922, having ringed sixteen hundred and seventy birds. These comprised forty species, and like Mr. Mayall's list, were mostly Passeres, but included a few of some unusual species, such as Peregrine Falcon and Buzzard. Dr. Moon's largest numbers were Song-Thrush (313), Blackbird (261), Robin (212), Chaffinch (130), Willow-Warbler (121), and Wren (107). Third on the list are Mr. and Mrs. Taylor, also with a very large total, viz. : one thousand and fifty-nine. In their list are thirty-five species, of which twenty-seven are Passeres, Linnet (249), Blackbird (140), and Chaffinch (110), being the largest numbers, while the eight non-passerine species account for only twenty-eight individuals. Captain Boyd's total, which is just under one thousand, is made up of fifty species, which, I think, is probably a record number to be ringed in the same year by one ringer. Of these, twenty-one are non-passerine birds. Captain Boyd's largest numbers are Mallard (172), Song-Thrush (98), Swallow (92), Blackbird (48), Shag (46), and Puffin (34). Mr. Bartholomew's total is made up chiefly of Passeres, but includes Wood-Pigeon (22), and Lapwing (145). Mr. Macdonald's list is decidedly unusual, including among its twenty-eight species a Golden Eagle and five Ravens, and having as its chief figures Guillemot (232), Gannet (119), Kittiwake (80), and Rook (80). Dr. Joy's list numbers forty-two species, mostly Passeres. In the London Natural History Society's list are included forty-nine Great Skuas.

We have to welcome a number of new helpers, and among these Mr. H. G. Watson (272), Colonel P. C. Macfarlane (231), Mr. A. H. R. Wilson (192), Mr. S. G. Pooch (145), Mr. P. K. Chance (102), and Mr. L. J. Turtle (91), have made most useful beginnings.

Turning to the species ringed, I am glad to see increases in Mallard, Gannet, Shag, Wood-Pigeon, Guillemot and Rook.

A number of interesting recoveries have come to hand since my last Report and among these I may draw special attention to the Wheatear ringed as a nestling at Seaford (Sussex) and found a month afterwards near Whitstable (North Kent)—an unaccountable journey (*antea*, p. 79), and the Swallow ringed near Cardiff and found in the Belgian Congo (*antea*, p. 80), besides the many valuable records published in this number.

NUMBERS OF EACH SPECIES "RINGED."

	'09-'16	'17	'18	'19	'20	'21	'22	'23	Total
Crow, Carrion ..	22	No record	kept			16	11	18	67
Rook ..	179	38	23	3	8	17	6	94	368
Jackdaw ..	134	29	9	4	7	29	20	18	250
Jay ..	30	—	6	—	5	2	7	6	56
Starling ..	6088	560	219	151	169	411	454	736	8788
Greenfinch ..	2072	254	260	206	187	380	386	352	4097
Goldfinch ..	10	No record	kept			20	12	10	52
Twite ..	42	—	—	—	3	1	—	1	47
Redpoll, Lesser ..	132	—	4	—	3	5	17	12	173
Linnet ..	920	162	173	46	122	272	377	575	2647
Bullfinch ..	136	18	21	20	40	52	23	63	373
Chaffinch ..	2039	338	262	220	367	521	618	635	5000
Sparrow, House ..	464	—	—	—	2	1	1	2	470
Sparrow, Tree ..	175	9	4	17	20	48	40	32	345
Bunting, Yellow ..	327	47	62	29	41	100	101	144	851
Bunting, Reed ..	188	98	54	20	39	59	54	39	551
Lark, Sky ..	1364	213	150	51	41	63	64	61	2007
Pipit, Tree ..	186	8	5	15	31	34	42	57	378
Pipit, Meadow ..	1055	113	85	12	22	134	62	61	1544
Wagtail, Yellow ..	76	16	9	5	5	26	19	20	176
Wagtail, Grey ..	105	—	8	1	—	11	25	37	187
Wagtail, Pied ..	593	91	17	20	46	124	112	130	1139
Creeper, Tree ..	12	No record	kept			24	13	11	60
Tit, Great ..	733	16	16	8	26	31	18	23	871
Tit, Blue ..	647	11	5	—	6	12	32	11	724
Tit, Coal ..	88	—	—	—	15	3	—	1	107
Tit, Marsh ..	52	—	—	—	—	—	4	—	56
Tit, Long-tailed ..	41	—	—	—	—	—	—	5	46
Wren, G.-crested ..	40	—	—	1	1	1	—	7	50
Shrike, R.-backed ..	104	13	16	17	22	29	11	19	231
Flycatcher, S. ..	515	115	100	65	114	157	72	126	1264
Flycatcher, Pied ..	6	No record	kept			43	13	1	63
Chiffchaff ..	56	8	6	—	19	68	25	22	204
Warbler, Willow ..	1464	146	154	108	206	284	274	402	3038
Warbler, Wood ..	77	—	18	3	34	71	59	80	342
Warbler, Reed ..	141	19	54	38	31	39	21	23	366
Warbler, Sedge ..	117	53	72	32	30	80	50	57	491
Warbler, Garden ..	102	9	1	14	55	55	42	56	334
Blackcap ..	88	17	9	—	21	32	37	26	230
Whitethroat ..	298	34	40	85	130	179	133	177	1076
Whitethroat, L. ..	114	3	11	13	28	23	19	33	244
Fieldfare ..	85	—	—	—	—	—	—	—	85
Thrush, Mistle ..	529	45	33	21	33	77	103	171	1012
Thrush, Song ..	7774	680	789	475	621	1042	1052	1702	14135
Redwing ..	42	—	—	—	—	3	—	—	45
Ouzel, Ring ..	80	—	3	1	—	3	5	26	118
Blackbird ..	4308	453	446	386	469	918	920	1334	9234
Wheatear ..	167	8	17	—	11	75	155	83	510
Whinchat ..	275	54	65	17	55	17	30	60	562
Stonechat ..	136	—	—	—	—	5	25	50	222
Redstart ..	196	—	13	15	12	135	76	102	549
Nightingale ..	41	—	5	5	19	10	20	10	128

	'09-'16	'17	'18	'19	'20	'21	'22	'23	Total
Redbreast	..2220	244	204	162	299	494	507	865	4995
Sparrow, Hedge	..1537	140	98	110	185	246	221	409	2946
Wren ..	.. 667	26	34	11	76	265	133	321	1533
Dipper ..	.. 123	5	11	5	8	18	8	19	197
Swallow ..	..4594	1470	714	512	307	382	821	889	9689
Martin ..	..1159	401	137	87	87	144	245	296	2556
Martin, Sand	.. 569	116	29	32	52	37	18	159	1012
Swift ..	.. 6	No record kept				27	72	37	142
Nightjar ..	.. 38	7	2	2	6	7	5	10	77
Wryneck ..	.. 141	25	29	—	17	8	8	2	230
Cuckoo ..	.. 83	13	14	7	7	20	16	22	182
Owl, Long-eared	.. —	—	30	—	2	10	12	7	61
Owl, Barn..	.. 69	6	—	1	5	14	2	13	110
Owl, Tawny	.. 74	11	14	18	8	15	14	14	168
Merlin ..	.. 16	No record kept				1	6	4	27
Kestrel ..	.. 39	6	7	3	4	12	3	20	94
Buzzard ..	.. 2	No record kept				11	3	2	18
Hawk, Sparrow	.. 60	—	2	—	5	4	9	19	99
Heron, Common	.. 110	—	1	—	—	—	6	14	131
Sheld-Duck	.. 49	—	—	1	21	1	—	4	76
Mallard ..	.. 570	70	4	—	1	41	58	180	924
Teal ..	.. 84	12	—	33	20	—	1	—	150
Wigeon ..	.. 70	6	1	2	23	1	15	—	118
Duck, Tufted	.. 65	—	—	—	—	—	4	1	70
Cormorant	.. 470	—	21	72	—	—	—	—	563
Shag ..	.. 156	—	—	10	—	—	—	46	212
Gannet ..	.. 198	—	—	—	—	—	26	119	343
Shearwater, Manx	69	—	—	—	3	—	—	9	81
Wood-Pigeon	.. 153	11	20	9	19	33	26	61	332
Dove, Stock	.. 41	4	1	5	6	26	7	15	105
Dove, Turtle	.. 58	3	8	7	5	9	12	13	115
Oystercatcher	.. 84	7	3	6	4	5	7	20	136
Plover, Ringed	.. 126	2	14	1	19	39	19	47	267
Plover, Golden	.. 43	—	6	—	—	4	1	2	56
Lapwing ..	..3588	168	154	123	125	220	345	358	5081
Sandpiper, C.	.. 160	7	25	16	13	10	24	37	292
Redshank ..	.. 235	35	25	3	13	25	26	32	394
Curlew, Common..	186	7	17	4	14	36	67	58	389
Snipe, Common	.. 164	28	19	3	6	19	18	8	265
Woodcock..	.. 345	—	3	—	17	8	31	28	432
Tern, Sandwich	.. 655	23	—	53	31	30	77	153	1022
Tern, Common	..2919	174	761	—	144	706	2	44	4750
Tern, Arctic	.. 77	8	—	20	25	24	2	1	157
Tern, Little	.. 174	—	1	—	9	—	9	1	194
Gull, B.-headed	11946	—	4	11	—	5	—	—	11966
Gull, Common	.. 507	7	—	—	—	—	26	36	576
Gull, Herring	.. 510	1	—	1	—	6	9	20	547
Gull, L. Blk.-bkd..	2537	—	84	77	471	197	455	120	3941
Gull, G. Blk.-bkd..	78	—	—	—	—	—	2	3	83
Kittiwake	.. 33	—	50	1	—	—	43	86	213
Razorbill ..	.. 60	—	4	—	5	—	18	42	120
Guillemot ..	.. 23	No record kept				—	106	255	384
Puffin ..	.. 901	—	2	2	—	—	8	45	958
Moor-Hen ..	.. 240	27	24	7	20	12	33	25	388

NUMBER OF BIRDS "RINGED."

MR. A. MAYALL (2224), Dr. H. J. Moon (1670), Mr. W. P. G. and Mrs. L. E. Taylor (1059), Capt. A. W. Boyd (935), Messrs. J. Bartholomew (729), D. Macdonald (633), Dr. N. H. Joy (526), Messrs. J. F. Thomas (356), H. G. Watson (272), R. M. Garnett (260), Mr. and Mrs. R. O. Blyth (241), Mr. A. S. Corbet (238), Col. P. C. Macfarlane (231), Messrs. H. W. Robinson (228), P. E. A. Morshead (203), A. H. R. Wilson (192), The Lon. Nat. Hist. Soc. (183), Messrs. S. Poock (145), J. R. B. Masefield (140), J. F. Mitchell (139), J. Wilcock (124), H. S. Gladstone (123), Miss F. K. Staunton (117), Mr. T. Kerr (114), Mrs. Patteson (112), Mr. A. C. Fraser (111), Mrs. L. Marshall (103), Mr. P. K. Chance (102), Major W. M. Congreve (93), Messrs. L. J. Turtle (91), B. Clarke (78), Miss C. M. Acland (76), Dr. J. N. D. and Mr. T. L. Smith (70), Mrs. T. E. Hodgkin (54), The Rev. E. Peake (53), Mrs. Leyborne Popham and Miss L. W. Streatfield (47), Messrs. J. F. Madden (47), R. W. Corbett (43), J. H. O'Connell (41), K. Fisher (40), T. Danby (40), T. A. Coward (38), D. Joy (38), J. V. Stevens (36), C. F. Archibald (35), A. C. Greg (31), Miss N. H. Greg (30), Messrs. H. Bentham (28), H. S. Greg (28), C. W. Thompson (27), Miss B. Wigram (27), Mrs. H. M. Rait Kerr (25), Miss B. A. Carter (25), Messrs. W. G. Bramley (23), J. S. Elliott (23), A. H. Greg (21), and others who have ringed under 20 each.

SOME PERCENTAGES OF RECOVERIES.

Species.	Number Ringed 1909-12.	Number of these Recovered to date.	Percentages of Recoveries.
Rook ...	274	14	5.1
Starling ...	8,052	471	5.8
Greenfinch ...	3,745	33	0.8
Linnet ...	2,072	20	0.9
Chaffinch ...	4,365	46	1.0
Sky-Lark ...	1,946	16	0.8
Meadow-Pipit ...	1,483	21	1.4
Pied Wagtail ...	1,003	20	1.9
Spotted Flycatcher ...	1,138	2	0.1
Willow-Warbler ...	2,636	19	0.7
Whitethroat ...	899	4	0.4
Song-Thrush ...	12,433	161	1.2
Blackbird ...	7,900	206	2.6
Wheatear ...	433	4	0.9
Redbreast ...	4,130	152	3.6
Wren ...	1,212	20	0.1
Swallow ...	8,800	68	0.7
Martin ...	2,260	13	0.5
Sparrow-Hawk ...	80	14	17.5
Heron ...	117	17	14.5
Mallard ...	744	153	20.5
Cormorant ...	563	97	17.2
Gannet ...	224	12	5.3
Wood-Pigeon ...	271	16	5.9
Lapwing ...	4,723	123	2.6
Redshank ...	362	20	5.5
Curlew ...	331	14	4.2
Snipe ...	257	25	9.7
Woodcock ...	404	47	11.6
Sandwich Tern ...	869	10	1.1
Common Tern ...	4,706	94	1.9
Black-headed Gull ...	11,966	526	4.3
Herring Gull ...	527	17	3.2
Lesser Black-backed Gull ...	3,821	153	4.0

RECOVERY OF MARKED BIRDS.

STARLING (*Sturnus v. vulgaris*).—58,116, 55,433, ringed at Patterdale, Westmorland, as young birds, by Dr. H. J. Moon, on June 10th and 3rd, 1923. Reported at co. Fermanagh, Ireland, and Penrith, Cumberland, in October and November, 1923, by Mr. E. Swift and Mrs. A. Harrison.

97,777, ringed at Seaford, Sussex, as an adult, by Mr. J. F. Thomas, on June 18th, 1922. Reported where ringed, on November 9th, 1923, by Mr. A. J. Banks.

56,685, ringed at Theale, near Reading, Berks, as a nestling, by Dr. N. H. Joy, on May 21st, 1923. Reported near where ringed, on November 1st, 1923, by Mr. G. L. Layley.

51986, 56603, ringed at Bradfield, near Reading, Berks, as 56,685 by Dr. N. H. Joy, on December 2nd and 18th, 1922. Reported where ringed, on May 15th, 1923, and in January, 1924, by the ringer and Mr. P. L. Widdows.

99,922, ringed at Broughty Ferry, Forfarshire, as a young bird, by Messrs. J. N. D. and T. L. Smith, on August 22nd, 1921. Reported at Leven, Fifeshire, in January, 1924, by Mr. W. Bisset.

98863, ringed at Cheadle, Staffs, as a nestling, by Mr. J. R. B. Masefield, on May 16th, 1921. Reported where ringed, on August 8th, 1922, and again on December 23rd, 1923, by the ringer.

GREENFINCH (*Chloris c. chloris*).—A.8,718, ringed at Streat-ham, London, S.W., as a young bird, by Mr. F. J. Mitchell, on July 20th, 1923. Reported at Lower Edmonton, London, N., on December 19th, 1923, by Mr. F. S. Passhall.

LINNET (*Carduelis c. cannabina*).—A.2,380, A.4,205, ringed at Burnham and Eton, Bucks, as nestlings, by Mr. A. Mayall, on August 12th, 1922, and May 14th, 1923. Reported at Farnham Royal, Bucks, and where ringed, early in October and on September 5th, 1923, by Miss L. Harvey and Mr. J. B. Channon.

BULLFINCH (*Pyrrhula p. nesa*).—E.P. 80, ringed at Rugby, Warwickshire, as a nestling, by Mr. J. G. Maynard, on June 27th, 1917. Reported near Leamington, Warwickshire, on December 27th, 1923, by Mr. C. H. Benton per Her Grace The Duchess of Bedford.

CHAFFINCH (*Fringilla c. cælebs*).—A.3,590, ringed at Woodside, Pyrford, Surrey, as an adult, by Mr. W. P. G. Taylor,

on April 6th, 1923. Reported where ringed, on August 11th, 1923, by the ringer.

PZ.38, ringed at Eton, Bucks, as an adult, by Mr. A. Mayall, on August 4th, 1920. Reported at Windsor, Bucks, late December, 1923, per Dr. G. C. Low.

PIED WAGTAIL (*Motacilla a. yarrellii*).—A.4,242, ringed at Eton, Bucks, as a nestling, by Mr. A. Mayall, on May 18th, 1923. Reported at Torrão, near Alcacer do Sal (Estremadura), Portugal, by Senhor Gaspar de Queiroz Coelho Vasconiellos. Published in a Portuguese newspaper of November 13th, 1923.

WHITETHROAT (*Sylvia c. communis*).—A.8,498, ringed at Frensham Ponds, Surrey, as a nestling, by Mr. and Mrs. R. O. Blyth, on June 26th, 1923. Reported at Limoges (Haute Vienne), France, in September, 1923, by Mons. J. Bouquillard.

MISTLE-THRUSH (*Turdus v. viscivorus*).—56,297, ringed at Radford, near Leamington, Warwickshire, as a nestling, by Mr. P. K. Chance, on April 24th, 1923. Reported near La Rochelle (Charente Inférieure), France, on November 19th, 1923, by Mons. André Bouchetard.

SONG-THRUSH (*Turdus ph. clarkci*).—96,750, ringed at Laugharne, Carmarthenshire, as a nestling, by Mr. J. F. Thomas, on April 24th, 1920. Reported near where ringed, end of April, 1923, by Mr. James Thomas, per the ringer.

59,101, ringed at Manton, near Marlborough, Wilts., as a young bird, by Mr. W. P. G. Taylor, on June 24th, 1923. Reported at Oare, Marlborough, Wilts., on November 5th, 1923, by Mr. F. Billington.

53,155, ringed at Seaford, Sussex, as a nestling, by Mr. J. F. Thomas, on May 16th, 1923. Reported at Listrac, Médoc (Gironde), France, on October 28th, 1923, by Mons. A. Guitard.

52,167, ringed at Broughty Ferry, Forfarshire, as a nestling, by Messrs. J. N. D. and T. L. Smith, on May 19th, 1922. Reported where ringed on November 21st, 1923, by Mr. J. Gibson.

57,640, ringed at Gt. Budworth, Cheshire, as a nestling, by Capt. A. W. Boyd, on June 13th, 1923. Reported at Ahamore Causeway, co. Kerry, Ireland, mid-November, 1923, by Mr. D. Hussey.

BLACKBIRD (*Turdus m. merula*).—59,219, ringed at Balnakeilly, Perthshire, as a young bird, by Mr. A. H. R. Wilson, on May 17th, 1923. Reported 18 miles from where ringed, on September 15th, 1923, by Lady Stormonth Darling.

59,242, 53,130, ringed at Seaford, Sussex, and Laugharne, Carmarthenshire, as a nestling and a young bird, by Mr. J. F. Thomas, on June 22nd, 1923, and September 4th, 1922. Reported at Lexden House School, Seaford, Sussex, and where ringed, in August, and on July 31st, 1923, by Mr. W. C. Clayton and the ringer.

A.5,585, ringed at Torrance, Stirlingshire, as a young bird, by Mr. J. Bartholomew, on May 25th, 1923. Reported at Cadder, near Glasgow, Stirlingshire, in August, 1923, by Mr. E. Richmond Paton. Published in the *Glasgow Evening News*.

99,980, ringed at Broughty Ferry, Forfarshire, as an adult, by Messrs. J. N. D. and T. L. Smith, on May 11th, 1922. Reported where ringed on November 4th, 1922, April 22nd and December 4th, 1923, by the ringers. Ring replaced and bird again released.

52,239, ringed as 99,980, on December 24th, 1922. Reported where ringed, on March 11th and December 9th, 1923, by the ringers. Re-ringed with Z.1,085.

55,226, ringed at Maidstone, Kent, as a nestling, by Mr. W. Wood, on June 8th, 1923. Reported where ringed, on December 7th, 1923, by Mr. J. H. Chittenden.

53,147, ringed at Laugharne, Carmarthenshire, as a nestling, by Mr. J. F. Thomas, on April 30th, 1923. Reported at Llanddowror, Carmarthenshire, in January, 1924, by the *Shooting Times*.

51,679, ringed at Hayes Common, Kent, as a young bird, by Mrs. C. M. Boord, on July 28th, 1921. Reported where ringed, late January, 1924, by Mr. C. R. Pendrill.

REDBREAST (*Erithacus r. melophilus*).—6,110, ringed at Prestbury, Cheshire, as an adult, by Mr. R. M. Garnett, on March 3rd, 1923. Reported where ringed, on November 21st, 1923, by the ringer. Ring replaced and bird released.

5,452, ringed at Laugharne, Carmarthenshire, as a bird of the year, by Mr. J. F. Thomas, on August 9th, 1922. Reported where ringed, on August 13th, 1923, by the ringer.

3,086, ringed as 5,452, an adult, on August 27th, 1921. Reported where ringed, on April 4th, July 31st, and August 9th, 1922, April 21st, 1923, and January 3rd, 1924, by the ringer.

5,448, ringed as 5,452, an adult, on August 6th, 1922. Reported where ringed, on November 20th, 1923, by Mr. R. H. Tyler, per the ringer.

A.2,886, ringed as 5,452, a nestling, on May 1st, 1923. Reported where ringed, on December 23rd, 1923, by the ringer. Ring replaced and bird released.

A.3,831, ringed at Bridge-of-Earn, Perthshire, as a young bird, by Mr. A. H. R. Wilson, on July 4th, 1923. Reported at Wormit, Fifeshire, late October, 1923, by Mr. A. Dow.

P.W.34, ringed at Streatham, London, S.W., as an adult, by Mr. F. J. Mitchell, on October 2nd, 1921. Reported where ringed, on October 22nd, 1921, June 24th, 1922, and September 4th, 1923. Re-ringed with A.8,203.

A.3,582, ringed at Woodside, Pyrford, Surrey, as an adult, by Mr. W. P. G. Taylor, on February 26th, 1923. Reported where ringed, on September 19th, 1923, by the ringer. Ring replaced and bird released.

A.1,064, ringed at Dorney, Bucks, as a nestling, by Mr. A. Mayall, on June 19th, 1922. Reported near Eton, Windsor, Bucks, in summer of 1923, by Miss M. M. Dover.

QY.55, QY.58, ringed at Broughty Ferry, Forfarshire, as adults, by Messrs. J. N. D. and T. L. Smith, on December 26th, 1921, and January 2nd, 1922. Reported where ringed, on April 10th, and December 23rd, 1923, by the ringers.

A.3,363, ringed at Sonning, near Reading, Berks, as a nestling, by Dr. N. H. Joy, on May 14th, 1923. Reported at Woodley, Berks, early January, 1924, by Mr. W. Hughes.

HEDGE-SPARROW (*Prunella m. occidentalis*).—QY.46, ringed at Broughty Ferry, Forfarshire, as an adult, by Messrs. J. N. D. and T. L. Smith, on November 13th, 1921. Reported where ringed on April 22nd, 1923, by the ringers. Ring replaced and bird released.

QY.56, ringed as QY.46, on December 27th, 1921. Reported where ringed, on December 24th, 1923, by the ringers. Re-ringed with A.7,272.

5,731, ringed as QY.46, on November 6th, 1922. Reported where ringed, on December 26th, 1923, by the ringers. Re-ringed with A.7,274.

5,740, ringed as QY.46, on April 22nd, 1923. Reported where ringed, on December 31st, 1923, by the ringers. Re-ringed with A.7,279.

A.6,070, ringed at Laugharne, Carmarthenshire, as an adult, by Mr. J. F. Thomas, on August 13th, 1923. Reported where ringed, on December 6th, 1923, by Mr. R. H. Tyler, per the ringer.

WREN (*Troglodytes t. troglodytes*).—A.8,190, ringed at Calver, Derbyshire, as a young bird, by Mr. J. F. Mitchell, on June 12th, 1923. Reported where ringed, on January 6th, 1924, by Mr. H. Barber.

SWIFT (*Apus a. apus*).—3,995, ringed at Theale, near Reading, Berks, as an adult, by Messrs. N. H. and D. Joy, on June 18th, 1921. Reported where ringed, on May 18th, 1923, by the ringer.

SPARROW-HAWK (*Accipiter n. nisus*).—73,572, ringed at Bradfield, near Reading, Berks, as a nestling, by Dr. N. H. Joy, on June 23rd, 1923. Reported at Watlington, Oxfordshire, on January 30th, 1924, by Mr. F. G. England.

HERON (*Ardea cinerea*).—102,833, ringed at Eaton Park, Chester, Cheshire, as a nestling, by Capt. A. W. Boyd, on April 21st, 1923. Reported at Llanfyllin, Montgomeryshire, on January 23rd, 1924, by Mr. C. R. Hughes.

CORMORANT (*Phalacrocorax c. carbo*).—100,582, 101,810, ringed on Saltee Island, co. Wexford, Ireland, and Castle Loch, Mochrum, Wigtownshire, as nestlings, by the late Mr. R. M. Barrington and Mr. J. G. Gordon, on June 8th, 1913, and June 14th, 1919. Both reported at Ferry Carrig, co. Wexford, Ireland, on January 11th, 1924, by Mr. J. Stafford.

SHAG (*Phalacrocorax a. aristotelis*).—102,815, ringed at Handa Island, Sutherland, as a nestling, by Capt. A. W. Boyd, on June 25th, 1923. Reported 1½ miles north-east of the Isle of Scalpa, Inverness-shire, on October 16th, 1923, by Mr. J. Mackinnon.

102,807, ringed as 102,815. Reported at Raasay, Inverness-shire, early January, 1924, by Mr. M. A. McLeod.

102,839, ringed as 102,815. Reported at Arisaig, Inverness-shire, on January 31st, 1924, by Mr. A. McEachen.

102,849, ringed at Badcall Islands, Sutherland, as a nestling, by Capt. A. W. Boyd, on June 26th, 1923. Reported at Sound of Harris, Outer Hebrides, on November 9th, 1923, by Mr. M. MacLeod.

102,812, ringed as 102,849. Reported at Kyleakin, Inverness-shire, on January 18th, 1924, by Mr. D. Grant.

102,822, ringed as 102,849. Reported at Isle of Skye, Inverness-shire, on December 28th, 1923, by Mr. D. Nicolson.

GANNET (*Sula bassana*).—102,771, ringed at Ailsa Craig, Ayrshire, Scotland, as a young bird, by Mr. D. Macdonald,

on July 17th, 1923. Reported on north coast of Sines, 50 miles south of Lisbon, Portugal, on November 19th, 1923, by Senhor Mario Tavares.

102,793, ringed as 102,771. Reported at Port Bail (Manche), France, on October 12th, 1923, by Mons. Lallemand.

102,795, ringed as 102,771. Reported at the Isle d'Yeu (Vendée), France, on September 18th, 1923, by Mons. S. Lucien, Captain of the "Chacal."

RINGED PLOVER (*Charadrius h. hiaticula*).—97,828, ringed at Gairloch, Ross-shire, as a nestling, by Miss N. H. Greg, on July 8th, 1923. Reported at Loch Maddy, N. Uist, on November 17th, 1923, by Mr. D. J. Moltens, per *The Field*.

LAPWING (*Vanellus vanellus*).—96,689, 51,346, ringed at and near Kilmacolm, Renfrewshire, as nestlings, by Mr. and Mrs. R. O. Blyth, on July 9th, 1921, and June 29th, 1922. Reported at Quoile, near Downpatrick, co. Down, Ireland, and Bridge of Weir, Renfrewshire, on November 24th and 21st, 1923, by Messrs. W. Dickson and J. A. Muirhead. Z.2,482, ringed at Wheen, Glen Clova, Forfarshire, as a young bird, by Mr. H. G. Watson, on July 11th, 1923. Reported 13 miles north of where ringed, on October 1st, 1923, by Mr. R. Milne.

88,131, 55,315, ringed at Torrance, Stirlingshire, as young birds, by Mr. J. Bartholomew, on June 7th, 1917, and May 25th, 1923. Reported at Garristown, co. Meath, and near Limerick, Ireland, on November 28th and 27th, 1923, by Messrs. Wm. McGuinness and M. Kerins.

Z.1,071, ringed at Machrihanish, Mull of Kintyre, N.B., as a young bird, by Mr. T. Kerr, on July 22nd, 1923. Reported at Parkfergus Farm, near Cambletown, Argyll, in December, 1923, by Master J. McPhee.

72,041, 73,565, ringed at Theale, near Reading, Berks., by Dr. N. H. Joy, nestling on May 20th, 1922, and adult on June 22nd, 1923. Reported near Bilbao, Spain, and near Weymouth, Dorsetshire, on January 1st, 1924, and December 3rd, 1923, by Señor N. Echeverria and Mr. W. Whittle.

54,823, ringed at Hornby, Lancaster, as a young bird, by Mr. H. S. Greg, on May 9th, 1923. Reported at San Salvador del Valle (Vizcaya), N. Spain, on December 10th, 1923, by Señor J. Zusaeta.

REDSHANK (*Tringa t. totanus*).—57,628, ringed at Silverdale, Lancs, as a nestling, by Capt. A. W. Boyd, on June 10th, 1923. Reported at Kingsbridge, South Devon, on January 2nd, 1924, by Mr. E. S. Heygate.

WOODCOCK (*Scolopax rusticola*).—53,214, 53,176, ringed at Lann and Thornhill, Dumfriesshire, as young birds, by Mr. H. S. Gladstone, on May 25th and July 14th, 1922. Reported where ringed and within a mile of where ringed, on December 10th and 27th, 1923, by the ringer.

COMMON GULL (*Larus c. canus*).—71,397, ringed at Handa Island, Sutherland, as a nestling, by Capt. A. W. Boyd, on July 8th, 1923. Reported at Lochinver, Sutherland, on February 4th, 1924, by Mr. R. E. Gisson.

LESSER BLACK-BACKED GULL (*Larus f. affinis*).—21,121, ringed at Foulshaw, Westmorland, as a young bird, by Mr. H. W. Robinson, on July 27th, 1922. Reported at Figueira da Foz, Portugal, on September 18th, 1923, by Capt. Raul Carlos Pinto.

33,219, ringed as 21,121, by Mr. F. W. Smalley, on June 25th, 1913. Reported at Commune de Charron, near La Rochelle (Charente Inférieure), France, on February 19th, 1917, by Mons. D. J. Feybaud.

GUILLEMOT (*Uria a. albionis*).—22,871, ringed at Ailsa Craig, Ayrshire, as a young bird, by Mr. D. Macdonald, on July 13th, 1923. Reported at Loch Fyne, Argyllshire, on October 16th, 1923, by Mr. J. Galbraith.

22,859, ringed as 22,871. Reported at Loch Fyne, Argyllshire, on December 21st, 1923, by Mr. A. Paterson. 22,896, ringed as 22,871. Reported near Dover, Kent, on December 9th, 1923, by Mr. C. P. Spillett.

23,005, ringed as 22,871, on July 17th, 1923. Reported at Fuenterrabia (Guipuzcoa), N. Spain, on January 17th, 1924, by Señor M. Bas.

MARKED ABROAD AND RECOVERED IN ENGLAND.

WOODCOCK (*Scolopax r. rusticola*).—Zool. Stat., Helgoland, 24,311, caught on migration and ringed on Heligoland, on April 29th, 1923, by Dr. H. Weigold at his "trapping station" in connection with the Biological Institute. Reported at Baronscourt, co. Tyrone, Ireland, on December 31st, 1923, by Mr. W. H. Workman, who received information from Mr. R. Taylor, head-keeper at Baronscourt, that this Woodcock had been shot by the Marquis of Hamilton.

BLACK-HEADED GULL (*Larus r. ridibundus*).—P. Skovgaard, Viborg, A. 889, ringed at mouth of Randers Fjord, N.E. Jutland, Denmark, on July 17th, 1919. Reported at Stanway, near Colchester, Essex, mid-March, 1923, by Mr. J. Pettitt. Published in *The Field*, April 5th, 1923.

NOTES

A FEEDING HABIT OF THE HOODED CROW.

ON December 21st, 1923, by the Orwell Estuary, I watched with interest the efforts of a Hooded Crow (*Corvus c. cornix*) to break some shelled or hard piece of food. The bird repeatedly (perhaps a dozen times) rose from a strip of exposed shingle to a height of 20-30 feet, then "dived" rapidly down, and when about half-way to the ground let fall the object on the stones below. Had the bird decided that to give a sort of "throw" was more effective than to let fall from the highest point? Or might it have been aiming at a particular stone?

T. G. POWELL.

[Cf. Yarrell, II., p. 286, etc.—EDS.]

THE NEST-BUILDING HABITS OF THE LONG-TAILED TIT.

DURING the spring of 1923 we had thirteen nests of the Long-tailed Tit (*Egithalos c. roseus*) under observation at one time or another.

Our experience tallies with Mr. Brown's (*antea*, p. 206) in many ways, but on several occasions we took photographs of the birds building between 4 and 5 p.m. (summer time) and at other times noticed them still building even later in the day, only at a slower rate.

Only two of our nests in hedges were built near roads or paths, and as a general rule we found that hedge nests were built away from paths. A point which struck us forcibly was the violent effort which often accompanied the lining of the interior of the nest with feathers as the whole fabric shook and bulged in an alarming manner.

Also, in conjunction with the experience of another observer, we found that the birds would go a very long way to some favourite spot for feathers when there were plenty near at hand.

After the young had flown we examined one or two of the nests more closely and found that two or three of the eggs had been broken or were addled and that one or two of the young birds had died, presumably from "over crowding."

On one occasion we saw the actual foundations of the nest being laid. We had heard the two birds chattering excitedly

in a young holly and after considerable search found one or two wisps of moss on a small twig. Subsequently we saw both birds add to this, one bringing moss and the other some spiders' web.

R. P. GAIT.

COLDSTREAM TUCKETT.

THE Long-tailed Tits observed by Mr. R. H. Brown (*antea*, p. 206) appeared to behave slightly differently from a pair which I watched in Surrey. Mr. Brown's birds carried only one feather at a time, but one of the birds which I observed dropped a small bunch of feathers which it was carrying. It consisted of six feathers of a Yellowhammer.

On several journeys the Tits each carried more than one feather, in fact, on one occasion, one of them appeared quite grotesque owing to the size of the "beak-full" that it was carrying, it could hardly see.

Mr. Brown mentions their fondness for building near a path, and the nest of the pair I write of was built in a small gorse bush between a very narrow path and a small lake, with the entrance hole on the opposite side to the path.

CLEMENCE M. ACLAND.

WILLOW-WARBLER'S NESTS AND CUCKOO'S EGG.

ON May 18th, 1923, I found a nest of a Willow-Warbler (*Phylloscopus t. trochilus*) in a grassy bank overlooking a path in the woods, and some eight feet above it, near Malvern. It contained two eggs, one of which was slightly bruised; when I next visited it on the 19th, there was only one egg in the nest and two outside. Several white feathers from the nest-lining were lying outside also. On the same day some six yards farther down the lane, on the same bank, I watched a Willow-Warbler building. The nest was as yet only half completed, but the exterior was finished on the 27th, and lined with white feathers when I next visited it on June 6th. Subsequently, on June 10th, it had apparently been deserted, there being no eggs laid.

Again on June 24th, some fifteen yards farther down the lane, there was a newly complete nest with four eggs and an egg of a Cuckoo (*Cuculus c. canorus*). This nest was lined with brown feathers, whereas the two previous nests had been lined with white exclusively. Did not the pair realize that the white feathers betrayed their nest? The Cuckoo's egg was one which would have harmonized well with a Meadow-Pipit's. In the place on the bank where the first nest of this pair had been (which I had bodily removed

after discovering the eggs outside) there were *two* Willow-Warbler's eggs, intact.

I removed the Cuckoo's egg, which when blown proved to be quite fresh.

The nest which contained the Cuckoo's egg was on the top of a steep bit of bank, and I could not detect any sign of damage to it. The nest opening was quite normal in character until the young were well advanced. G. W. THOMPSON.

BLACKBIRD FEEDING ON GRAIN.

A YOUNG cock Blackbird (*Turdus m. merula*) which has taken up its winter-quarters in our garden in Cumberland comes and feeds off the wheat thrown each morning to the fowls. Although it eats most wheat when the earth is frost-bound and food difficult to obtain, yet it will also feed off the grain during mild weather. R. H. BROWN.

WOODPECKERS AND PINE-CONES.

IN reference to Mr. Bunyard's interesting observations as to what he calls a "new habit" of the Green Woodpecker (*Picus v. virescens*) as observed by him in Surrey, and Mr. Witherby's note on similar behaviour of the Great Spotted Woodpecker (*Dryobates m. hispanus*) in Spain, Mr. Bunyard is mistaken in thinking that the habit has not been observed and described previously.

An interesting account of this habit, written by Mr. Edmund Selous, will be found in the *Zoologist* for 1908 (pp. 81-91); and in a later number of the same year (p. 228) a note by myself of a similar observation. Mr. Selous's observations were on Great Spotted Woodpeckers in Sweden. My own were of this species (*D. m. pinetorum*) observed in Switzerland (St. L  gier, above Vevey, Valais) in February, 1907. I find the following in my note-book:—

"13th Feb. To-day we watched the Great Spotted Woodpecker for some time. It was in one of the fir-trees [a clump near the house where I was staying] for a time, and then it got on to a large fir-cone and started to eat the cone. I was not aware that this was part of the food of Woodpeckers, but perhaps it was really getting insects from the cone. After a time it flew with a large piece of the cone, more than half I should think, to a tree too far off for us to see what it did with it." [I made no mention of the kind of fir-tree—my memory is spruce, but I am not certain—nor of how it carried the cone.]

" 28th. I noticed under one or two deciduous trees not far from the clumps of fir-trees that there were a lot of fir-cones, most of which were empty [of their seeds]. Presently I noticed in one of these trees that there was a hole, evidently made by the Great Spotted Woodpecker, in which there was a fir-cone, which exactly fitted in and was partly eaten. Evidently the Woodpecker is not able to eat the cone in the loose position in which it is on the tree, as a Tit might, so breaks it off and takes it away, as we saw it do a little time ago, to one of these purposely-made holes."

But later the same day: " I noticed that in the tree under which there are most fir-cones, close to the fir-trees, there is no place specially made, but there is a natural crevice that I expect it [the Woodpecker] uses. In the other tree there is a similar crevice, but apparently the Woodpecker did not think it good enough."

Green Woodpeckers were also constantly seen near, but I did not see them at work on the cones. H. G. ALEXANDER.

THE observations of Mr. Witherby and Mr. Bunyard, given in the last issue, have a particular interest for me as I have during recent years acquired some evidence which bears on the subject, and which, I think, proves that at times the Great Spotted Woodpecker (*Dryobates m. anglicus*) feeds largely on the seeds of cones.

In 1922 a New Forest keeper, who is a close observer of the habits of our birds, told me that he had found at the foot of a dead fir, a large collection of cones which had the scales opened, evidently for the purpose of extracting the seeds and he was for a long time puzzled as to what bird had been at work. His description of the appearance of these cones made me at once suggest Crossbills as the operators, but he had not seen these birds in the district (as a matter of fact little has been seen of Crossbills in the Forest since the notable immigration of 1909, and the three following years), and it was only after patient watching with glasses that the mystery was solved. He told me that he saw a Great Spotted Woodpecker with a cone, fly to the tree and perch on a short branch about 20 ft. up and set to work opening the scales. I visited this tree with the keeper, who particularly called my attention to the condition of the cones, which were all from the Scots pine (*Pinus sylvestris*) and had been worked when fresh and green, the scales prised open all round as Mr. Witherby notes. Not far away another tree had been used as a feeding place, but not to the same extent as the branch on the dead tree which evidently was a very convenient spot for holding the

cone. The ground under this branch was covered with cones, many of course old, withered, and brown, but on examination I found that all had been attacked when fresh and green.

Most of our text books tell us that the Green Woodpecker feeds occasionally on beechmast, nuts, acorns, etc., fir-cones are not mentioned, but several writers say that the Great Spotted Woodpecker feeds on the seeds of fir-cones. The statement is to be found in the works by the following: Yarrell, Morris on the authority of Meyer, Seebohm, and Stonham.

During the hard winter of 1917, Green Woodpeckers in the New Forest, suffered severely and were much reduced in numbers, but so far as I could ascertain the Great Spotted Woodpecker was not affected to the same extent. It is not so easy to speak definitely of such a shy bird, one more often heard than seen, but from what I heard, I formed the opinion that its numbers were well maintained. Perhaps it was saved from starvation by a vegetable diet. R. E. COLES.

UNUSUAL FLIGHT OF A KESTREL.

ONE calm, sunny day in November, 1923, I was walking across some moorland in Cumberland when my attention was attracted by the peculiar flight of a Kestrel (*Falco t. tinnunculus*). It was rising to a moderate altitude by rapid wing-beats and then on motionless, outspread wings gliding downwards, the distance thus traversed in gliding being about four times as great as that covered in rising. It kept on in this manner, alternately flying upwards and gliding, until out of sight. This mode of flight is of course used by the Curlew (*Numenius a. arquata*) when uttering its mating-song in the spring, but in this case the performance is restricted to the bird's breeding-territory. I have seen the Common Buzzard (*Buteo b. buteo*) pass through the air by this alternate rising and gliding, but this is the first time I have seen a Kestrel do so in order to traverse any considerable distance.

R. H. BROWN.

NESTLING OF ROCK-DOVE.

As no description of the nestling of the Rock-Dove is given in the *Practical Handbook* (Vol. II., p. 482) the following notes may be of interest. The nestling Rock-Dove (*Columba livia*) is blind for some few days after being hatched. It is sparsely clad with coarse yellowish down with a reddish tinge about it.

Legs and feet, leaden-flesh; bill leaden, but tipped with light flesh colour. The fledging period is approximately three weeks.

JOHN WALPOLE BOND.

RUFF WINTERING THREE TIMES IN LANCASHIRE.

IN December, 1920, a Ruff (*Philomachus pugnax*) was seen frequenting the tail-end of a derelict mill-race in one of the poorer parts of the town of Lancaster. It left during the third week in March, 1921, to return again during the third week in September. It remained a second winter and again departed on or about March 16th, 1922. About the usual time during the following September it turned up again to spend a third winter, and departed again on or about March 24th, 1923. As it has not turned up in its haunts this winter it must be presumed that its course is run. H. W. ROBINSON.

COMMON SANDPIPER IN WESTMORLAND IN MID-WINTER.

ON December 30th, 1923, I saw a Sandpiper on the shore of Lake Windermere which appeared to be the Common Sandpiper (*Tringa hypoleuca*). It remained in the neighbourhood till January 1st, 1924, when I shot it. The ground was covered with snow to the water's edge at the time, and though not fat, the bird proved to be in quite good condition, but only weighed 1 oz. and was ascertained to be a female by dissection. On account of the light weight and the colour of the back and wing coverts I had doubts as to its being a Common Sandpiper, but Mr. H. F. Witherby and the Rev. F. C. R. Jourdain who have examined the specimen agree in identifying it as a Common Sandpiper (*T. hypoleuca*). Although a few occurrences in the winter months are on record for the south of England, there seems to be no record for the north of England as late as this, though Hancock mentions one shot in Northumberland on November 16th, 1830, and one was recorded from Staffordshire on December 15th, 1917 (cf. *Br. B.*, Vol. XI., p. 235).

J. F. PETERS.

SPOTTED REDSHANKS IN SOMERSET.

WITH reference to the records of the Spotted Redshanks (*Tringa erythropus*), (*antea*, pp. 211 and 212), it may interest Somersetshire naturalists to know that there is, in the Dick's Institute, Kilmarnock, a Somersetshire specimen in the "Richmond Paton" collection.

It is an immature bird and is labelled as follows:—
 “Petherick, Nr. Taunton, November 16, 1876: ex coll:
 Cecil Smith, No. 188.” This is believed to be the first record
 for Somersetshire. E. RICHMOND PATON.

[A still earlier record is that of W. E. Leach, who ascribes
 a ♂ “*Totanus raii*” in the British Museum collection to
 ‘Somerset (J. Anstice, Esq.).’ This List was printed in 1816.
 Col. Montagu also obtained one from a small flock near
 Bridgwater. Both records are earlier than that given by
 Mr. Paton.—F. C. R. JOURDAIN.]

ROSEATE TERN BREEDING IN CUMBERLAND.

WITH reference to Mr. H. W. Robinson’s note on the occurrence
 of Roseate Terns (*Sterna dougallii*) in Cumberland in 1902
 (*antea*, Vol. XVI., p. 254), I was interested to find in one of
 my old note books that a pair nested at Ravenglass, Cumber-
 land, that year. One of the birds was caught by the keeper
 on the nest, identified, and released. The young hatched out
 and got away safely. E. U. SAVAGE.

THE NORMAL CLUTCH OF SANDWICH TERNS’ EGGS.

I SHOULD like to supplement my remarks (*antea*, p. 189) on
 the rarity of a genuine clutch of three eggs in the Sandwich
 Tern (*Sterna s. sandwicensis*) in these Islands, by quoting from
 a letter from Mr. C. V. Stoney, who, in Ireland at any rate,
 has had an almost unrivalled experience of the British
 breeding Terns. He says:

“I thought you might like to have my experiences, extending
 over nearly twenty years, in which period I have personally
 visited all the known colonies of this Tern in Ireland, except one,
 and have discovered two new ones. I may say in a word that your
 experience exactly bears out my own. There are seven known
 colonies of Sandwich Tern in Ireland. Of these, three are in inland
 loughs and four on islands lying off the coast. The largest of these
 existing colonies is on a fresh water lough in County Mayo and is
 strictly preserved, no boat being allowed on the lough during the
 entire breeding-season. Through the kind permission of the owner,
 I was enabled to visit this locality some years ago, and we had to
 cart a boat from the nearest river three miles away in which to get
 out to the island. There were about three hundred pairs of Sand-
 wich Tern nesting with Black-headed Gulls. On May 21st incubation
 was well advanced. About three-quarters of the nests contained
 two eggs, and the remainder one. There was not a single three.
 I have only once seen a three in other colonies, and though it is
 dangerous to dogmatize in the case of birds’ eggs, especially those
 of Terns where two eggs in a set are often quite distinct, I don’t
 believe that this three is a genuine one bird effort. In my experience
 where the birds are undisturbed, two is rather commoner than one

as a set, and threes simply do not exist outside collections. The colonies I have seen consist of from fifty to three hundred pairs, so there has been every chance of detecting an abnormal laying."

It will be seen that all this agrees with Mr. Carroll's experience in Ireland and my own in Norfolk, and that the percentage of genuine clutches of three eggs in undisturbed localities must be almost negligible.

Mr. Robinson may be right in his contention (p. 213) that the food supply influences the number of eggs laid; but it is doubtful if the difference in the supply can be so great as to account for a rise from almost nil in Ireland and Norfolk, to "well over ninety per cent." of clutches of three in Holstein.

CLIFFORD BORRER.

[It should not be forgotten that in other species of Tern there is similar variation in the number of eggs in the clutch. The Roseate Tern almost invariably lays one egg only in Ireland, while on the other side of St. George's Channel, I have seen scores of nests with two eggs. In the Black Sea the Caspian Tern normally lays three eggs, sometimes two only, while in the Persian Gulf the normal clutch is one, and two occasionally, and on List the normal set was two, according to Rohweder.—F. C. R. JOURDAIN.]

TAWNY OWL PREYING ON LITTLE GREBE.—Mr. C. F. D. Sperling sends us a foot and part of a leg of a Little Grebe (*Podiceps r. ruficollis*) which he found on January 10th, 1924, in his garden at Ballingdon Hall, Sudbury, Suffolk, under a tree in which a Tawny Owl (*Strix a. sylvatica*) is constantly perched. The flesh from the leg had been eaten off the bone. Mr. Sperling has also found heads of water-voles under the same tree and frequently pellets. The River Stour and marshes from which the Little Grebe was probably taken are about 300 yards away.

NEST MATERIALS OF PIED FLYCATCHER.

To the Editors of BRITISH BIRDS.

SIRS,—I write to support Mr. P. F. Bunyard's statements (*antea*, p. 192).

In the course of my life I must have looked at upwards of twenty nests of the Pied Flycatcher (*Muscicapa h. hypoleuca*) in Central Wales (among others many easily examined in my nesting boxes). Never have I, to the best of my recollection, seen any feathers in a nest, but a conspicuous material which was *always* present was the bark of honeysuckle, and it is so typical of all the nests I have ever seen that any nest without it would to me be remarkable. At my old home in Montgomeryshire there was never any lack of chickens' feathers within a few yards of my Pied Flycatcher occupied nesting boxes.

I have known the Redstart to nest in close proximity to the Pied Flycatcher, and cannot help thinking that the two species may sometimes be confused, or else that a Pied Flycatcher may sometimes occupy an old, or new but deserted, Redstart's site—hence the feathers!

W. M. CONGREVE.

CANNIBALISTIC PROPENSITY OF A REDBREAST.

To the Editors of BRITISH BIRDS.

SIRS,—Is the Redbreast (*Erithacus rubecula*) a cannibal as well as a murderer among its own species? My query is prompted by the following:—

About two weeks ago the Lady Kathleen Ward described to me how one of her household staff had seen a live Redbreast pecking at a dead one. I was so interested in this account that Lady Kathleen on her return home collected the remains—still in the same spot—and sent them to me. Except for the head, which was deficient, the skeleton was intact. There were just sufficient primary wing-feathers to enable me to recognize the species and the bones had a thin film of flesh adhering to them. That the main part of the flesh had been removed by "pecking" appeared to me extremely probable. Whether the live Redbreast was also the murderer is, of course, problematical, but it is of course well known that this species *does* fight to the death against invaders of its territory.

Lady Kathleen's evidence is as follows:—

"I went with my nurse this morning (January 19th) and she showed me the corpse which was just where they had seen it last. As it may interest you, I send it. When they first saw the live Robin it was pecking at the dead one and only hopped off a little way when they went to look. Then it was partly eaten. On their return home they stopped again; the Robin was still there eating the dead one and there was a good deal then left! Next day there were only the bones. At first the dead bird was quite recognizable, its red breast still showed.

KATHLEEN WARD."

W. M. CONGREVE.

WRYNECKS IN SURREY.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Percy F. Bunyard in his Surrey Field Notes (*antea*, p. 202) mentions the Wryneck as "a comparatively rare bird in this county." In other parts, however, they appear to be more numerous than in his locality.

I have known the bird as a nesting species in the Epsom district for some years, and find among my notes for 1917 that they seem to be on the increase.

In 1918 a pair nested in a nesting box within 12 ft. of the window of a house, and brought off a brood of seven. In the same season another nesting box a few miles away was occupied by another pair, but the young birds died.

In the large woods between these two nesting boxes were two other pairs, for whose nests I had not time to search.

Wrynecks have appeared in each of the subsequent seasons but have not used the first nesting box again, nor, as I have left the neighbourhood, do I know if they still use the second.

I visit the locality at Easter each year, and have never failed, when there at the end of April, to hear or see Wrynecks.

CLEMENCE M. ACLAND.

TWO YOUNG CUCKOOS FED BY THE SAME PIED WAGTAIL.

To the Editors of BRITISH BIRDS.

SIRS,—*A propos* Mr. Chance finding more than one Cuckoo's egg in the same nest (*vide ante* p. 98) does the foster-parent *rear* more than one Cuckoo at a time?

On August 19th, 1923, my brother and his wife watched for some time (on the lawn of Milborne Port Vicarage), a pair of Pied Wagtails assiduously feeding a couple of large young Cuckoos, just able to fly, and apparently of the same age.

Would the somewhat bulky nest of the Wagtail be able to accommodate both youngsters, or is it more probable that the association was started after they had left separate nests?

T. G. POWELL.

IPSWICH, *January 17th*, 1924.

CUCKOOS' EGGS IN DOMED NESTS.

To the Editors of BRITISH BIRDS.

SIRS,—Having had some experience of Cuckoos' eggs in domed nests, I was interested in Mr. Bunyard's note on this subject *vide* pp. 202–204. With regard to the Cuckoos' eggs found in the two Wrens' nests, there appear to be one or two points where further details would be desirable. Both Wrens' nests are described as having been completely encircled by brambles and the entrance hole in both cases measured only $1\frac{1}{4}$ inch and this "in spite of the fact that they had been disturbed by the boy in extracting the eggs." Having regard to what is stated it is not readily understood how the boy was able to get at the eggs without practically any damage being done to the nests. Obviously the boy did not cut or interfere with the brambles to any extent, as Mr. Bunyard saw the nests completely encircled by brambles as described, after the eggs had been taken. Further, he says that "in neither case could the Cuckoo have placed the cloaca nearer than two to three inches from the nest." How then was it possible for the boy to have extracted the eggs and still leave the nests undamaged and the size of the entrance holes near enough to normal. Apart from my own experience there are at least four competent field-ologists who have actually found Cuckoos' eggs in Wrens' nests in this country, and noted at the time damage to the nests, and therefore the boy's experience related by Mr. Bunyard is opposed to what seems to be general.

The question seems to be one which demands the greatest possible care, even with our most reliable field-naturalists. Anything but first-hand evidence should be taken at its true value. Unless the observation is carried out and noted before the nest is touched, either with a view to ascertaining the number of eggs, or before the process of removing the eggs takes place, it is impossible to give any useful information regarding the damage.

D. W. MUSSELWHITE.

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS,

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND.

TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.



F. H. L. WHISH,
LYMPHAM, SOMERSET.

*Completion of
this Important
Standard Work.*

*"Indispensable
to all Working
Ornithologists."*

A

Practical Handbook OF British Birds

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

EDITOR OF BRITISH BIRDS (MAG.).

Authors of the Various Sections:

ERNST HARTERT, PH.D., M.B.O.U.

ANNIE C. JACKSON, H.M.B.O.U.

(Mrs. MEINERTZHAGEN)

Rev. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U.

G. OLDHAM, F.Z.S., M.B.O.U.

N. F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

AND THE EDITOR.

Over 1,500 pages of Letterpress. Illustrated with 30
Coloured and Monochrome Plates, and about 350
Text Figures.

IN TWO VOLUMES. BOUND CLOTH. GILT TOPS.

ORDINARY EDITION:

Two Volumes (bound as three) £4 10s. net.

THIN PAPER EDITION:

Two Volumes £5 7s. net.

ILLUSTRATED PROSPECTUS POST FREE ON APPLICATION.

LONDON:

H. F. & G. WITHERBY, 326 High Holborn, W.C.1

Bird Room.

BRITISH BIRDS

AN ILLUSTRATED MAGAZINE
DEVOTED CHIEFLY TO THE BIRDS
ON THE BRITISH LIST

APRIL 1.
1924.

Vol. XVII.
No. 11.



MONTHLY 1s 9d. YEARLY 20s.
326 HIGH HOLBORN LONDON.
H. F. & G. WITHERBY.

NATURELAND.

The Illustrated Magazine of Natural History.

THE MAGAZINE YOU HAVE BEEN LONGING FOR.

"It is the kind of Nature Magazine we have been wanting for some time."—*Westminster Gazette.*
"We wish Dr. Renshaw every success."—*Ibis.*

VOLUME III. JUST COMMENCING.

Better write at once for Illustrated Prospectus from the Editor,

DR. GRAHAM RENSHAW, SALE, MANCHESTER.

W. F. H. ROSENBERG,

Naturalist & Importer of Exotic Zoological Collections

Head Office and Museum of Bird Skins and Exotic Lepidoptera, etc.,

57, HAVERSTOCK HILL, LONDON, N.W.3.

PRICE LISTS—Birds' Skins (5,000 species),

Exotic Lepidoptera (8,000 species)—Post Free.

Branch Establishment for the supply of Entomological and other Natural History requisites, books, and specimens—

25, CROMWELL PLACE, LONDON, S.W.7.

(Near the Natural History Museum.)

Price List of Apparatus Post Free.

A Naturalist's Paradise.

LUNDY ISLAND.

Birds in their tens of thousands migrate to nest on the Island in April, May, June and July, and there is probably no other spot within the British Isles where so many species may be observed with such perfect ease and intimacy within easy distance of a comfortable and up-to-date Hotel. During this period the Island is visited from far and near by Bird-lovers.

Accommodation may be obtained at :

The Manor House Hotel, Lundy.

FOR TARIFF APPLY :

Secretary, The Cottage, Shirwell, N. Devon.

*Telegrams: Hotel, Lundy-Island-Coast-Guard-Station.
(telegraphically counted as one word).*

For observations on "Birds of Lundy," May and June, by Capt. Lewis R. W. Loyd, see Vol. XVI. of this Magazine, issued November 1st, 1922.

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER II, VOL. XVII., APRIL 1, 1924.

	PAGE
Ornithological Notes from Norfolk. By B. B. Riviere, F.R.C.S., M.B.O.U.	254
Notes :—	
Bones of Starling found in a Roman Urn in Herefordshire (H. A. Gilbert)	274
Hawfinch in Renfrewshire (R. O. Blyth)	274
Late Immigration of Sky-Larks into Kent (H. G. Alexander)	274
Waxwings in Ireland (Geo. R. Humphreys)	275
Waxwings in England (The Editors)	275
Winter Breeding of Wren (H. E. Forrest)	275
Woodpeckers and Pine-cones (A. E. H. Swaen, H. G. Alexander, N. Tracy and G. E. Lodge)	276
Glossy Ibis in co. Cork (Geo. R. Humphreys)	280
Garganey Breeding in Essex (R. H. Tutt)	280
Oil-clogged Common Scoters Inland in Sussex and Hampshire (A. F. Griffith)	281
Smews and other Wild-fowl on the Conway Estuary (H. E. Forrest)	281
Birds on North Worcestershire Reservoirs, 1922 and 1923 (H. G. Alexander)	282
Ringed Plover Nesting among Potatoes (H. W. Robinson)	283
Redshank Breeding in Surrey (M. S. Curtler)	283
Distinctions of American Snipe and its Occurrence in Britain (H. F. Witherby)	283
Little Gull in Ireland (Robert F. Ruttledge)	288
Ivory-Gull in Gloucestershire (F. H. L. Whish)	288

Short Notes :—

Two Hen Sparrow-Hawks Laying Together. Common Bitterns in Sussex and Anglesey. Smew Inland in Norfolk. Gannet Inland in Essex. Manx Shearwater in Shropshire. Bartram's Sandpiper in Scilly Isles	288
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----

Letters :—

Birds removing Nesting Material to another Site (R. P. Gait and G. E. Lodge)	290
The "Normal" Clutch of Eggs (Wm. Rowan)	290
Cuckoo's Eggs in Domed Nests (H. R. Tutt and Major Cecil Smeed)	291

ORNITHOLOGICAL NOTES FROM NORFOLK.

BY

B. B. RIVIERE, F.R.C.S., M.B.O.U.

IN taking up the record of Norfolk Ornithology at the point where, with tragic suddenness, it was interrupted by the death of Mr. J. H. Gurney, I do so in a very humble spirit, and with a keen appreciation of the difficulties which confront me. To Norfolk ornithology the loss of Mr. Gurney is an irreparable one. For twenty-nine years, first to the *Zoologist* and latterly to *British Birds* he has contributed his "Annual Ornithological Report from Norfolk," and the amount of time which he was able to devote to ornithology, his keen powers of observation, his extraordinary energy in collecting information, and above all the peculiar literary charm of his writing enabled him to maintain in them a standard of excellence, which his successor must find it indeed difficult to approach.

It was with some misgivings, therefore, that I consented to Mr. Witherby's request that I should take up the task laid down by Mr. Gurney, and continue these "Notes from Norfolk" in *British Birds*. I certainly should not have done so, had it not been for the help and support so generously promised me by other Norfolk ornithologists, and it is to the redemption of this promise in the form of observations and notes, that what I am able to record is chiefly due. I tender my grateful thanks, therefore, to all my correspondents for their help, and particularly to Mr. Gerard Gurney, Mr. E. Gunn, Capt. L. Lloyd, Dr. S. H. Long, Mr. A. H. Patterson, Mr. H. N. Pashley, Mr. E. C. Saunders, Mr. N. Tracy, and Miss E. L. Turner.

Mr. Gurney's Report (*Brit. B.*, XVI., pp. 230-239) carries the history of Norfolk birds up to October, 1922. The notes completing this year I think it best to keep separate from those for 1923, especially as very few of the species referred to are the same.

NOTES COMPLETING MR. GURNEY'S REPORT FOR
1922.

MIGRATION.

The October migration brought to the Norfolk coast an unusual number of Lapland Buntings, several Black Redstarts, a Scops-Owl, and a Richard's Pipit, but perhaps its most remarkable feature was the "wreck" of Redwings.

On the night of October 5th a gale sprang up from the E.N.E. and it continued to blow hard from the same quarter

on the 6th, on which day Mr. Pashley reported a large arrival of Redwings, Song-Thrushes, Blackbirds, Fieldfares, Redstarts and Blackcaps at Cley.

On October 7th the wind was still E.N.E. and strong, and a fresh arrival of Song-Thrushes, Redwings, Chaffinches and two Ring-Ouzels took place at Blakeney (R. Pinchen). I was shooting at Paston, a few miles from the coast, on this day and found the root-fields full of Song-Thrushes.

On October 12th many Redwings were seen by Mr. Pinchen on the sandhills at Cley.

On October 16th and 17th (wind N.E.) Mr. Pinchen noted an arrival at Blakeney of Goldcrests, Bramblings, Redwings, Fieldfares, Song-Thrushes, Blackbirds, Ring-Ouzels, Black Redstarts and Shore-Larks, whilst Redstarts and Robins in large numbers appeared at Cley (Pashley).

The unfortunate Redwings were presumably caught by the gale of October 6th-7th during their sea-passage, and suffered severely. I picked up ten in half a mile at high-water mark at Mundesley on October 8th, and several more, together with two drowned Wood-Pigeons, on 10th. On October 14th Mr. A. H. Patterson, in a walk of two miles along the North Beach at Yarmouth, made a "mixed bag" of bird remains, which upon being examined by the late Mr. J. H. Gurney, was found to consist of forty-seven Redwings, four Chaffinches, two Blackbirds and one each of Song-Thrush, Wood-Pigeon, Meadow-Pipit and House-Sparrow. Another collection made by Miss Ferrier at high-water mark at Hemsby on October 19th contained twenty-one Redwings, a Hedge-Sparrow, a Robin and a Rook.

Blackbirds were still arriving at Blakeney on November 10th and November 18th (R. Pinchen).

LAPLAND BUNTING (*Calcarius l. lapponicus*).

On October 21st (the wind having been E.N.E. since the 15th) three Lapland Buntings were shot at Cley and others seen, and during the course of the next few days at least twenty were identified (C. Borrer, *Brit. B.*, XVI., p. 306).

On October 24th Mr. Pashley records a small flock at Cley, and on October 28th four more.

RICHARD'S PIPIT (*Anthus r. richardi*).

One shot at Cley on October 21st (wind E.N.E.) (C. Borrer, *Brit. B.*, XVI., p. 306).

BLACK REDSTART (*Phœnicurus o. gibraltariensis*).

Several Black Redstarts put in an appearance during October. Mr. Pinchen saw one at Blakeney on October 13th ;

whilst another was shot at Cley on the 14th (C. Borrer, *Brit. B.*, XVI., p. 306). On the 16th several more were identified by Mr. Pinchen at Blakeney Point, amongst other small migrants, the wind being N.E.

CONTINENTAL HEDGE-SPARROW (*Prunella m. modularis*).

Amongst a collection of drowned migrants, to which I have already referred, which were picked up by Miss Ferrier at high-water mark at Hemsby on October 19th, and forwarded to the late Mr. J. H. Gurney, was a solitary Hedge-Sparrow, concerning which Mr. Gurney, during his last illness, wrote to Mr. A. H. Patterson as follows: " I judge her (Miss Ferrier's) specimen to be the Continental *Prunella m. modularis* . . . if so, it is the second for Norfolk " . . . (*Trans. Norf. & Norwich Nat. Soc.*, Vol. XI., p. 442). Unfortunately after Mr. Gurney's death this collection of wings could not be found, and as Mr. Gurney's " if so " rather suggests that he had not been able to satisfy himself completely as to the bird's identity, some element of doubt attaches to the record.

The only other recorded example for Norfolk was one obtained by myself on October 17th, 1919, at Blakeney (*Brit. Birds*, XIII., p. 218).

LITTLE OWL (*Athene n. mira*).

Mr. Pashley reports three Little Owls at Cley on October 28th.

I hope that Dr. W. E. Collinge's paper on the " Food and Feeding Habits of the Little Owl " published in the *Journal of the Ministry of Agriculture* in February and March, 1922, will be as widely read as it deserves.

Dr. Collinge is able to prove, after a thorough and exhaustive investigation, that not only is the Little Owl in almost every instance harmless to game, but that next to the Lapwing it is the farmers' best friend. A gamekeeper of my acquaintance, of the type unfortunately too rare, who relies upon his own powers of observation, allows—and has done for several years—two pairs of Little Owls to nest within a few hundred yards of his Pheasant coops where, each season, between 1,000 and 2,000 young Pheasants are reared. Although he has had to shoot several Tawny Owls which took to raiding the coops, he assures me that he has never known a Little Owl take, or attempt to take, a single young Pheasant.

I have had these two nests under observation for the past two years and have collected pellets from them at all seasons, but have never been able to discover the remains of any game-bird, either in the nesting-holes or in the pellets. All the pellets which I have examined have consisted almost

entirely of the wing-cases of beetles, but I have found the remains of a number of small birds, including those of Black-birds, and Song-Thrushes, in the nesting-holes, and upon several occasions, long-tailed field-mice.

Far stronger evidence in favour of this quaint little bird is, however, afforded by the investigations of the late Mr. T. Gunn, the well-known Norwich taxidermist. Since the time when the rapid spread of the Little Owl reached Norfolk, a large number have been brought to Mr. Gunn for preservation, and it was his habit to make careful notes of the contents of the stomach of every bird which passed through his hands. Through the kindness of Mr. Ernest Gunn, who is now carrying on his father's business, I have been able to see these notes for four consecutive years, namely, from January, 1913, to December, 1916. During this period there passed through Mr. T. Gunn's hands forty-four Little Owls, of which one was obtained in each of the months January, February, March and April, two in May, three in June, ten in July, six in August, four in September, five in October, six in November and four in December, and the following is a brief summary of his notes upon the contents of their stomachs: Every one contained the remains of beetles. Not one contained any "game." Four contained the remains of mice. Only one contained the remains of "some young bird." In conclusion, Mr. Gunn had written: "The Dor Beetle seems to be the staple and favourite food of the Little Owl."

SCOPS-OWL (*Otus s. scops*).

Mr. Pinchen reports having seen a Scops-Owl at Blakeney Point on October 6th. Wind N.E. strong.

HEN-HARRIER (*Circus c. cyaneus*).

A female shot at Cley on October 20th. (Pashley.)

SPARROW-HAWK (*Accipiter n. nisus*).

The absence of gamekeepers during the war gave this little Hawk for four years a respite, which it had not enjoyed for many generations, and it was quick to take advantage of it. A keeper recently informed me that, on his beat of between 2,000 and 3,000 acres, he had killed no less than forty during the year 1922. This shows that even now it is a long way from being reduced to the comparative rarity it was prior to 1914, and I for one am glad of it. If the beaters put nothing but Pheasants out of our Norfolk coverts, covert-shooting would, to my mind, lose more than half its charm.

COMMON BITTERN (*Botaurus s. stellaris*).

Mr. Pashley reports that on October 24th a fine male Bittern

was found upon Cley Golf Links, so entangled in some wire-netting that it had broken its neck, as well as a wing and a leg.

WHOOPER AND BEWICK'S SWANS (*Cygnus cygnus* and *C. bewickii*).

In spite of the mild and open winter, large numbers of Wild Swans appeared upon the coast during the months of November and December, and seem to have been passing from east to west. On November 6th Mr. Pinchen saw two herds of eight and ten Whoopers flying west at Blakeney; on November 7th six more. On 22nd, between sixty and seventy Whoopers appeared at Blakeney, the day being foggy with a west wind, and Mr. Pinchen identified one Bewick's. On 26th fifty more Whoopers were reported by Mr. Pinchen at Blakeney. On 28th a herd of fifty Whoopers arrived on Breydon and one Bewick's was shot (Patterson). No more Swans were reported until December 20th, on which day and the day following Bewick's Swans were passing from east to west along the beach and marshes at Cley in herds containing from five to fifty birds, one counted from the cliffs at Sheringham containing forty-five (Pashley).

BEAN-GOOSE (*Anser f. fabalis*).

A Bean-Goose, which turned the scale at 7 lb., was shot at Cley on December 1st (Pashley).

PINK-FOOTED GOOSE (*Anser brachyrhynchus*).

Mr. A. H. Patterson reports that Pink-footed Geese again frequented the Halvergate Marshes, which lie between Breydon and the River Bure, during the winter 1922-23. The geese first came to this marsh, I believe, in 1913, when between thirty and forty arrived and stayed all the winter, feeding on the marshes by day and going to sea at night. Each year since then more have come, and during the winter 1921-22 Mr. A. F. Sherlock, who regularly uses a gun-punt on Breydon, estimated their numbers at between 1,500 and 2,000. They are extremely wary, and in spite of persistent pursuit by every Yarmouth gunner, very few are shot each season.

SNOW-GOOSE (*Anser hyperboreus*).

Mr. J. Beddall-Smith reports a Snow-Goose at Holkham on December 20th which had frequented the marshes there for some weeks (*Brit B.*, XVI., p. 255). This was probably the same bird as that recorded by Mr. J. H. Gurney (*l.c.*, p. 235) as having arrived at Holkham early in October. In connection with these two records it should, I think, be stated, that an all-white Goose *with white primaries*, and therefore pre-

sumably an albino, and corresponding in size to a Pink-footed Goose, was seen by several observers amongst the Holkham Geese during the winter 1922-23 (H. Wormald, *Brit. Birds*, XVI., p. 292).

If Mr. J. Beddall-Smith could state, in confirmation of his identification of the Snow-Goose, that he was able to distinguish black flight-feathers in the bird he saw, it would add very considerably to the value of his record. Otherwise it is, I think, difficult to resist the conclusions that the Snow-Goose and the albino are one and the same bird.

RED-NECKED GREBE (*Podiceps g. griseigena*).

One was identified by Mr. Pinchen at Blakeney on November 3rd.

BLACK-NECKED GREBE (*Podiceps n. nigricollis*).

Mr. Pashley reports one killed at Cley on December 9th.

Mr. Thomas Southwell (Stevenson's *Birds of Norfolk*, Vol. 3, p. 250) regarded this Grebe as "exceedingly rare" in winter plumage, and was only able to record three examples obtained in Norfolk during the winter months (two in November and one in December) out of a total of thirty-two.

During recent years it appears to have occurred in Norfolk during the winter more frequently, though less often than the Slavonian, as might be expected from its more southerly geographical range. It still visits us in spring and autumn, and may, I hope, one day remain to breed as it has recently done in Hertfordshire. On July 14th, 1920, with Col. Eardley Todd, who had recognized them on the previous day, I watched a pair on one of our broads, and on April 20th, 1922, Col. Todd again found a pair upon the same broad. I was fortunate enough to find them still there on April 30th, after which date they were seen no more.

LITTLE STINT (*Calidris minuta*).

Several small flocks at Cley on October 10th (Pashley).

ICELAND GULL (*Larus glaucoides*).

I learn from Mr. Pashley that an immature Iceland Gull was killed at Cley on December 9th. This makes the third obtained in Norfolk during the year.

SCANDINAVIAN BLACK-BACKED GULL (*Larus fuscus fuscus*).

A Lesser Black-backed Gull, which had been shot at Cley on September 4th, and which was shown to me by Mr. Pashley, belonged to the dark-backed Scandinavian race, few of which have, so far, I believe, been obtained in Norfolk.

COMMON GULL (*Larus c. canus*).

A Common Gull which was "telegraphed" at Flordon, near Norwich, on December 29th, was found by Rev. I. Easton, into whose possession it came, to have upon its leg a metal ring bearing the following inscription: "50028 Adresse: H. Pedersen, Fr.—Sund. Danmark." As already reported (*Brit. B.*, XVI., p. 305), this bird was marked on June 22nd, 1922, as a young one on a small island in the Firth of Roskilde, S. Jaelland, Danmark.

GREAT SKUA (*Stercorarius s. skua*).

Two were seen at Stiffkey by Mr. J. Beddall Smith on December 20th (*Brit. B.*, XVI., p. 255).

COMMON PARTRIDGE (*Perdix p. perdix*).

An example of the curious erythristic form (*Perdix montana* Brisson) was shot by Capt. Lloyd on September 22nd at Taverham. This variety first made its appearance in Norfolk in the year 1896, when three were shot near Dereham. Since then it has continued to crop up from time to time, and always within a few miles of the locality where it first occurred.

QUAIL (*Coturnix c. coturnix*).

One was caught alive on October 16th at Cley (Pashley). During the same month Mr. C. Borrer was shown a clutch of Quail's eggs, taken out of a deserted nest which had been found when harvesting at Blakeney (*Brit. B.*, XVI., p. 290).

REPORT FOR 1923.

The year 1923 proved to be somewhat devoid of interest so far as Norfolk Ornithology was concerned, the most notable events being, perhaps, the occurrence on October 10th of a Marsh-Warbler, which is a new bird to the Norfolk list, and the nesting for the first time in the county of the Grey Wagtail. The mild, open weather, and consequent scarcity of wildfowl during the first two months of the year—in marked contrast to the year before—contributed to the blankness of the year, as did—and perhaps more so—the almost complete absence during September of the host of small migrants which one is accustomed to look for at their favourite halting-place upon Cley beach and Blakeney Point. Not a single Bluethroat was met with during the autumn, and collectors and observers departed empty-handed and with empty notebooks. Against this may, perhaps, be set the extraordinary number and variety of waders which have visited Cley Marshes during the year. These marshes, which have remained flooded since the sea-wall

was breached during the gale on the last day of the year in 1921, have become an ideal feeding-ground, and as a resting-place for rare waders on migration, bid fair to rival the attractions of Breydon. Thanks to the owner, Mr. A. W. Cozens-Hardy of Cley Hall, the birds which frequent the marshes are well protected.

The hard frosts and wintry weather of November and December did not drive any rare birds to Norfolk, nor did any great numbers of duck put in an appearance until the last few days of the year. Woodcock, however, arrived upon the coast in large numbers throughout December, and some very big bags for Norfolk were made during the months on shoots near the coast.

SPRING MIGRATION.

There was some evidence of a "weather migration" during the short spell of rough weather, with snow and sleet, which we experienced between February 14th and February 21st. On February 17th flocks of duck were flying south at Lowestoft, and during the night geese and waders, including Dunlin and Oystercatchers, were heard passing over the town (F. C. Cook). On February 15th and 16th a steady stream of waders were passing over Hickling, including Grey Plover, Dunlin and Ringed Plover, whilst skeins of geese arrived in the same locality between February 10th and 18th.

The bitter cold weather and persistent east winds which prevailed throughout April were not, one would have supposed, conducive to birds seeking their nesting-quarters, but in spite of these conditions, spring-migrants arrived at very much their accustomed dates, some early records being: Wheatear, March 26th (Pinchen); Chiffchaff, March 27th; Sand-Martin, March 27th (Miss Turner); Willow-Wren, March 30th (Miss Turner); Yellow Wagtail, March 30th (Miss Turner); Swallow, April 2nd (*Eastern Daily Press*); House-Martin, April 2nd (Miss Ferrier).

The most interesting note of the spring migration comes, however, from Blakeney Point, where on May 6th Mr. R. Pinchen watched quite a "rush" of small migrants, which had apparently just arrived. These consisted of Common Whitethroats, Willow-Wrens and Redstarts, and included a pair of Pied Flycatchers, a Wood-Lark and several Blue-throats, which latter are but rarely met with in Norfolk on the spring migration.

AUTUMN MIGRATION.

The feature—though a negative one—of the early autumn migration was, as I have already mentioned, the failure of

the usual small migrants such as Redstarts, Flycatchers, Warblers, etc., to put in an appearance upon the Norfolk coast during September, and their absence was most noticeable at Cley and Blakeney, where they are most observed. The cause of this was, no doubt, the persistent westerly winds which blew throughout the month. Whether such small migrants are able to cross the North Sea against a head wind of much strength is, perhaps, a matter of opinion. Personally I do not believe they are able to do so, and certain it is that they only appear upon our coast in any numbers with a wind between east and north.

The late autumn migration was very much more in evidence, and some big movements were recorded by various observers.

On October 15th, with a westerly wind, many Starlings, Sky-Larks, Linnets, Chaffinches, Redwings and Song-Thrushes were passing from east to west along Cley beach, and a Wheatear, a Goldcrest and a Ring-Ouzel were seen in the "bushes." (C. Borrer and G. S. B. Long.)

On October 17th and 18th a marked arrival of Snipe took place, and on these two days Capt. Lloyd and another gun killed thirty-one couple (seventeen Full, and forty-five Jack) on one marsh.

On the night of October 19th a big arrival of birds took place (wind S.6 at Cromer), the keeper at Cromer Lighthouse reporting large numbers of Sky-Larks, Starlings, Blackbirds and Thrushes about the light from midnight till dawn. Mr. Gerard Gurney, who was on the cliffs early next morning, found the trees and bushes to be swarming with Chaffinches, Blackbirds and Tree-Sparrows and noted large numbers of Sky-Larks upon the adjacent fields. Upon the same day Mr. Caton-Haigh recorded a very large passage of Redwings, Starlings, Sky-Larks, Linnets and Lapwings at North Cotes, Lincolnshire (*Brit. B.*, XVII., p. 186).

From October 20th-28th my correspondent at Hickling reported a steady influx each day of Starlings, Finches, Rooks, Jays, Song-Thrushes, and Redwings all moving from east to west against a westerly wind, which on some of these days was blowing very hard. The next large influx appears to have occurred on October 27th and 28th. On 27th a strong southerly wind was blowing, which had dropped the following day. On both days, and practically all day long, Sky-Larks, Starlings, Chaffinches, Rooks, Meadow-Pipits, and Linnets were coming in from the sea at Mundesley and passing inland (Miss Johnson).

On 27th Sky-Larks, Chaffinches and Meadow-Pipits were passing over Norwich from E.N.E. to W.S.W. during the

afternoon, Lapwings and Hooded Crows were passing west at Blakeney Point (R. Pinchen), whilst "thousands" of Starlings, with Sky-Larks and a few Chaffinches were coming in from sea at Cley, travelling from N.E. to S.W. (E. Ram). On 28th Mr. F. C. Cook reported Sky-Larks and Starlings to be "pouring in" from the sea at Lowestoft in the early morning. This movement was also in evidence on the Lincolnshire coast, Mr. G. H. Caton Haigh writing to me that between October 27th and November 2nd a very large arrival of birds took place.

I do not think it is generally recognized how late in the year the biggest migratory rushes from east to west across the North Sea usually take place. It was on November 7th, 1912, that Dr. S. H. Long and the writer witnessed an immense passage of this kind at Hunstanton (*Zool.*, 1913, p. 177), and it was upon the same date this year, that the biggest "rush" of the season took place, this again, curiously enough, coming under the observation of Dr. Long. This movement, which was on a vast scale, appears to have begun on November 6th and lasted throughout the 7th, 8th and 9th, the maximum daylight passage taking place on 7th. A study of the weather charts for November 5th, 6th and 7th shows the formation of an area of low pressure over Iceland, the filling up of a "low" over Scandinavia, and the formation of a high-pressure area to the S.W. of the British Isles. The wind, which had been west for some days, changed to N.W. (Gorleston) on November 6th, remained in the same quarter on 7th, which was a bitterly cold day, and was S.W. on 8th. On the west coasts of Norway, Denmark, and Holland, it was from a westerly quarter on November 5th and 6th and variable and very light on 7th. Probably the cause of this big movement was the fall in temperature, the minimum screen temperature in Norwich falling each day between November 4th and November 8th from $41^{\circ}.2$ on 4th to $24^{\circ}.8$ on 8th, on which day there was a fall of snow in the early morning. During the same period the temperature fell on the west coast of Norway from 45° to 37° , in Denmark from 48° to 43° , and in Holland from 46° to 39° . The best idea of this great passage of birds will, I think, be obtained from a brief summary of the notes, between November 6th and November 9th, of the various observers who witnessed it.

Nov. 6th, BLAKENEY POINT:—Blackbirds, Song-Thrushes, Sky-Larks and Lapwings passing west (R. Pinchen). MUNDESLEY:—Redwings, Starlings, Sky-Larks, etc., coming in from sea, and Redwings heard passing at night (Miss Johnson).

Nov. 7th, BLAKENEY POINT:—A "great migration" of Crows, Starlings, Fieldfares, Sky-Larks, and Lapwings, from east to west

(R. Pinchen). **MUNDESLEY** :—Fieldfares, Sky-Larks, and Starlings coming in from sea and Redwings heard passing at night (Miss Johnson). **CROMER LIGHTHOUSE** :—Starlings in large numbers, and a few Curlews, around the lantern at night. Lapwings coasting east to west in the morning (P. Havery, Keeper). **HICKLING** :—Flocks of Redwings coming in, and three Whoopers arrived. **HOCKHAM** (this parish is in a latitudinal level with Lowestoft) :—Fieldfares, etc., passing east to west most of the day (H. Upcher). Dr. S. H. Long who fortunately happened to be motoring from Norwich to Cromer on this day, soon discovered that he was crossing the line of a big migration. Flocks of Fieldfares, Redwings and Sky-Larks were crossing the road from east to west throughout the whole journey of twenty-two miles. At Kelling, at mid-day, he found the movement to be still in progress, Fieldfares and Redwings, with some flocks of Starlings and a few Hooded Crows, passing continuously. One flock of Fieldfares he estimated to contain over 100 birds, and a mixed flock of Fieldfares and Redwings many more than this. Dr. Long then went on to Salthouse, where he was informed that an immense number of the same birds had been flying west all the morning, together with a large number of Lapwings. On Salthouse Broad were fifteen Whooper Swans which had come in from the east at 10 a.m. During the afternoon the migration had practically ceased, though Skylarks were still on the move at 4 p.m.

LINCOLNSHIRE :—"Immense passage of birds at Grimsby lasting all day till 2.30 p.m., and then at long intervals till 4 p.m. Fieldfares to S.W. very high, Lapwings, Rooks, Starlings and Skylarks to N.W. in an almost continuous stream." (G. H. Caton Haigh.)

Nov. 8th, **YARMOUTH** :—"Good influx" of Starlings and Sky-Larks (A. H. Patterson). **HAPPISBURGH LIGHTHOUSE** : "Huge numbers" of Starlings and a few Redwings round the lantern at night, 100 Starlings killed. At dawn they all proceeded N.W. (W. H. Warder, Keeper). **MUNDESLEY** :—Redwings and Starlings coming in from sea (Miss Johnson). **CROMER LIGHTHOUSE** :—Starlings, Sky-Larks and Lapwings from east to west all morning (P. Havery, Keeper). **BLAKENEY POINT** :—Rooks, Fieldfares, Starlings, Sky-Larks and Lapwings still passing east to west all day (Pinchen). **TAVERHAM** (seven miles from Norwich) :—Fieldfares and Redwings flying east to west (Mrs. C. Walter).

Dr. Wright was informed by a North Sea skipper that on the night of November 8th his ship was covered with birds (species unknown), 200 being picked up dead, and that at dawn the survivors all flew towards the land, the ship being then off Flamborough Head (S. H. Long).

Nov. 9th, **CROMER LIGHTHOUSE** :—"Starlings in thousands, the largest number I have ever seen round a light" with a few Redwings. Wind S.W.5, misty and overcast, with rain (P. Havery, Keeper).

It is of interest to note, as showing the breadth of these big autumnal migrations, that all the most notable movements which took place in Norfolk during the season, *i.e.*, Oct. 19th, Oct. 27th, and Nov. 7th, were simultaneously recorded by Mr. Caton Haigh upon the Lincolnshire coast. On the other hand, we had nothing in Norfolk to correspond with the extraordinary immigration of Wood-Pigeons, which, he informs me, took place at North Cotes on November 17th.

On Nov. 24th another large east to west movement of Lapwings, Fieldfares and Sky-Larks was noted at Blakeney by R. Pinchen, and a still later one of Fieldfares and Redwings on Nov. 27th. On Dec. 2nd a big arrival of Lapwings was observed by Pinchen at Blakeney, and of Lapwings and Golden Plover by night at Mundesley

by Miss Johnson; whilst on Dec. 28th "thousands" of Redwings and a few Fieldfares were seen by E. Ram at Cley flying from east to west. These last may, I think, be classed as "weather-movements," due to the very wintry conditions prevailing in N.W. Europe at the time.

GOLDEN ORIOLE (*Oriolus o. oriolus*).

[It was reported in the *Daily Mail* of October 18th, 1923, that a male Golden Oriole had been seen on October 15th in the garden of a house at Overstrand. So far I have not been able to obtain any corroborative evidence of this record.]

HAWFINCH (*Coccothraustes c. coccothraustes*).

The Hawfinch appears to be by no means a common nesting species in Norfolk at the present time, and its unpopularity with gardeners will probably prevent its ever becoming so. Two pairs built nests in a garden at Boyland this year (Col. Irby), but unfortunately failed to escape the notice of the gardener.

MEALY REDPOLL (*Carduelis l. linaria*).

On December 19th a little flock of twelve Mealy Redpolls was seen by E. Ram to come in from the sea at Cley.

CROSSBILL (*Loxia c. curvirostra*).

I have heard of no Crossbill's nests in Norfolk this year, and in the Castle Rising district, Mr. N. Tracy considers that they have, each season, been losing ground. On December 27th, however, a male bird appeared in Mr. Tracy's sanctuary at South Wootton and it is very much to be hoped that they may again nest in this district in 1924.

BRAMBLING (*Fringilla montifringilla*).

Mr. N. Tracy writes to me that on April 30th, in his wood at South Wootton, he watched a female Brambling upon the ground gathering pieces of birch-bark in her bill. She was, however, not seen again, and no signs of a nest could be discovered. Another late Brambling was seen on June 9th by R. Pinchen at Blakeney.

LAPLAND BUNTING (*Calcarius l. lapponicus*).

Early in January a few Lapland Buntings were still to be seen at Cley (C. Borrer, *Brit. B.*, XVI., p. 306), and during the autumn the usual arrival took place. The first was identified by E. Ram on September 29th, and others were observed by Ram and R. Pinchen at Cley and Blakeney Point during October, November and December.

WOOD-LARK (*Lullula a. arborea*).

The Wood-Lark, I am glad to say, still appears to nest in south-west Norfolk, though not so freely. I think, as it does

in Suffolk. Mr. Norman Gilroy informed me this year that he had found four nests well on the Norfolk side of the boundary, and visiting the locality on June 16th I saw several little parties of birds, and watched a pair feeding three fully fledged young ones.

SHORE-LARK (*Eremophila a. flava*).

This regular Norfolk winter-migrant was, as usual, in evidence upon the coast, and is noted here for the reason that some were still at Blakeney Point as late as April 19th (R. Pinchen).

GREY WAGTAIL (*Motacilla c. cinerea*).

In 1921 a pair of Grey Wagtails were seen to be building a nest at Ellingham Mill on the Waveney. They were, however, molested by a pair of Pied Wagtails and eventually driven away (Mrs. Smith, *Trans. Norf. & Nor. Nat. Soc.*, Vol. XI., p. 216). This year Capt. Lloyd discovered a pair nesting at Taverham, and they were successful in rearing two broods, both nests being in holes in fallen masonry amongst the ruins of the old mill, and built within a few yards of each other. This is the first record of the Grey Wagtail nesting in Norfolk.

GREAT GREY SHRIKE (*Lanius e. excubitor*).

On March 26th one was seen by Mr. K. O. Nash near Castle Rising (*Trans. N. & N. Nat. Soc.*, XI., p. 455). On November 29th one was seen by Mr. Howard at Wroxham, and during the first week in December a third was picked up dead at Honing and sent to Mr. A. H. Patterson (*Eastern Daily Press*, December 11th, 1923). Mr. J. H. Kennedy writes (*t.c.*, December 14th) that the bird seen by him and Mr. T. Beevor at Hargham on April 28th, and recorded in the *Trans. N. & N. Nat. Soc.* (XI., p. 455) as a Great Grey Shrike, was probably wrongly identified, and as he describes this bird as "running in front of them" upon the heath, his conclusion is no doubt correct.

WAXWING (*Bombycilla garrulus*).

The only Waxwing which I have heard of is one which was reported to Mr. Gerard Gurney from the neighbourhood of Yarmouth on December 6th.

PIED FLYCATCHER (*Muscicapa h. hypoleuca*).

A pair were seen on May 6th by R. Pinchen, amongst other small migrants, at Blakeney Point. The usual autumn passage of Pied Flycatchers at Cley and Blakeney seems not to have occurred this year, though I saw one on September 19th at Mundesley.

WOOD-WARBLER (*Phylloscopus s. sibilatrix*).

Two pairs again nested this year near South Wootton (N. Tracy). It is probable that a few pairs of Wood-Warblers have nested in Norfolk for many years, as Henry Stevenson records their doing so at West Harling (*Birds of Norfolk*, Vol. I., p. 130) prior to 1866. The bird must, however, be extremely local, and no other instance has come to my knowledge, except those recorded by Mr. Tracy and Dr. Long, during the past two seasons (*Brit. B.*, XVI., p. 232).

MARSH-WARBLER (*Acrocephalus palustris*).

On October 10th a male Marsh-Warbler was obtained on the sand-hills near Blakeney Point. For the identification of this bird, which is new to the Norfolk list, I have to thank Mr. H. F. Witherby and Dr. C. B. Ticehurst. The wind was west on the day it was shot, but there had been a gale from N.E. on October 4th.

REDSTART (*Phœnicurus ph. phœnicurus*).

It is pleasant to be able to record the nesting of several pairs of Redstarts this year in Norfolk, where, although once common, they have in recent years become exceedingly rare. Mr. J. H. Gurney in 1903 wrote: "We have a considerable influx in spring, and undoubtedly many more breeders than twenty years ago" (*Zool.*, 1904, p. 212). The same writer, however, in 1916, states: "The Redstart appears to have forsaken East Norfolk" (*Brit. B.*, X., p. 235). During the fifteen years that I have resided in Norfolk, I have never, until this year, seen a nest, or a pair of birds in the nesting-season, and the only nest I have heard of was one in a garden at Thorpe in 1918 (*Trans. N. & N. Nat. Soc.*, X., p. 501), though at Brandon, just across the Norfolk-Suffolk boundary, several pairs were reported to be nesting in 1919 (Mrs. E. C. Smith, *l.c.*, Vol. XI., p. 100). This year Mr. Gerard Gurney writes me that a pair nested in the garden at Keswick Hall "for the first time for many years," Mr. N. Tracy had no less than three pairs nesting in his bird sanctuary at South Wootton, and on June 16th I watched another pair feeding young ones just out of the nest, near Weeting.

BLACK REDSTART (*Phœnicurus o. gibraltariensis*).

On March 26th one was seen at Blakeney Point, and on October 21st two more at the same place (R. Pinchen). This bird appears to be a regular winter visitor to Norfolk, but is seldom met with far inland. I only know of two records of adult males, namely one killed at Hoyeton in March, 1870, and one seen by Mr. Howard Saunders on May 15th, 1872, near

Erpingham (Stevenson, *Tran. N. and N. Nat. Soc.*, I., p. 116), all the other males which have been obtained having been in first winter plumage.

BLUETHROAT (*Luscinia svecica* ? subsp.)

On May 6th some Bluethroats were identified by R. Pinchen amongst other small migrants, apparently just arrived, at Blakeney Point.

SHORT-EARED OWL (*Asio f. flammeus*).

A nest containing five young and one addled egg was found by Capt. L. Lloyd on May 14th on a marsh near one of the Broads.

PEREGRINE FALCON (*Falco p. peregrinus*).

Several Peregrine Falcons were killed in the county during the first three months in the year. Under a dead tree, on a lonely tract of marsh, where during the latter end of March a fine adult Falcon met her fate, I found the remains of two Jackdaws, a Teal, a Partridge, a Wood-Pigeon and a Lapwing.

KESTREL (*Falco t. tinnunculus*).

An odd nesting-site was chosen by a pair of Kestrels in the Broads country this year, namely, a dry hummock on the ground beside Kendal Dyke, Hickling. Unfortunately, the eggs were broken by a member of a boating party, who, having come ashore for tea, proceeded to sit down upon the nest.

ROUGH-LEGGED BUZZARD (*Buteo l. lagopus*).

The only two records which I have for the year are one on October 9th at Mundham (Col. E. Todd) and one on November 5th at Cley (E. Ram). One was seen on Lowestoft Denes (Suffolk) by Mr. F. C. Cook on April 12th.

MARSH-HARRIER (*Circus æ. æruginosus*).

I learn from the best possible authority that in the spring of this year a pair of Marsh-Harriers frequented the locality where the Montagu's Harriers nest, but that no nest of the former was found. Another pair, or possibly the same, was reported by Mr. J. Cator to be frequenting another part of the Broads district, where both birds were seen as late as May 19th, but here again no nest could be discovered, and there is, I believe, no evidence that Marsh-Harriers have nested in the county since 1921. Prior to this, the last time a pair successfully nested was in 1915, and in 1919 a nest was built, but no eggs were laid.

MONTAGU'S HARRIER (*Circus pygargus*).

Thanks to continued protection, five pairs of Montagu's Harriers, I believe, successfully reared their broods in their

favourite area of the Broads. A young bird which I examined, which in August had come to a bad end in another part of the county, contained the legs and feet of three Sky-Larks, and those of some other small bird, which I could not identify.

HONEY-BUZZARD (*Pernis a. apivorus*).

On June 2nd an adult male was trapped in Bale Wood and brought to Mr. Pashley at Cley. It was flushed by a game-keeper from beside a Pheasant's nest containing eggs, and was later in the day caught in a trap placed beside the same nest (H. N. Pashley). Honey-Buzzards in adult plumage have but rarely occurred in Norfolk, whilst the vast majority of those recorded during the last fifty years have occurred in September.

OSPREY (*Pandion h. haliaëtus*).

On May 30th an Osprey, which had been captured on the rigging of a fishing-boat when off Smith's Knoll, was brought to Mr. E. C. Saunders at Yarmouth.

SPOONBILL (*Platalea l. leucorodia*).

No Spoonbills appear to have visited Breydon this year, but one was seen on Cley Marshes by Dr. Long on July 1st, where Ram tells me it remained until about 14th, when it was joined by another, a few days after which they both left.

LITTLE BITTERN (*Ixobrychus m. minutus*).

On July 14th a Little Bittern was seen by a good observer to fly across the river and drop into a reed-bed in the Broads district.

COMMON BITTERN (*Botaurus s. stellaris*).

It is pleasant to have to record that the Bittern, thanks to protection, seems now to be well established as a nesting species in Norfolk. Although only six nests were, I believe, actually seen this year, yet, judging from the number of males which were heard "booming" throughout the season, it seems probable that some sixteen or seventeen pairs nested in the county. "Booming" began on February 8th, and was last heard on July 17th, which, I am informed by Miss Turner, is the latest date of which she has a record.

WHOOPEE AND BEWICK'S SWANS (*Cygnus cygnus* and *C. b. bewickii*).

On October 1st a Bewick's Swan was killed at Cley (Pashley), and during November and December a good many herds of both Bewick's and Whoopers were reported from the coast.

GREY LAG-GOOSE AND CANADA GOOSE HYBRIDS.

Dr. S. H. Long reports (*Trans. N. & N. Nat. Soc.*, XI., p. 432), the mating of a Canada gander (*Branta canadensis*) on

Holkham Lake with a wild Grey Lag-Goose (*Anser anser*) which remained behind after the Holkham wild geese had left. Five goslings appear to have hatched out, which the Grey Lag-Goose was afterwards seen to be escorting about the lake.

ALBINO WILD GOOSE.

I learn from Dr. S. H. Long that a White Goose has again this winter been present amongst the Holkham Wild Geese. The Holkham keepers and the various gunners who have seen it, are, I understand, unanimous in describing it as being entirely white, including the flight-feathers, so that there would seem to be little doubt that it is an albino Pink-footed Goose. On November 20th, Mr. Pashley tells me, it was seen on Cley Marshes in company with a Pink-footed Goose.

GARGANEY (*Anas querquedula*).

Two pairs of Garganeys successfully hatched out in the Broads district.

PINTAIL (*Anas a. acuta*).

The Pintail is always rather an uncommon duck in Norfolk, and it is therefore, perhaps, worth recording that several have been obtained during the year. On August 1st two were shot at Cley, and on August 28th two more (A. W. Cozens-Hardy), while on December 31st a drake was killed at Haddiscoe out of a flock of five (E. Gunn).

GOOSANDER (*Mergus m. merganser*).

Some Goosanders appeared on Hickling Broad during the rough weather between February 14th and 18th. On February 19th an adult drake was killed near Yarmouth (Saunders), and on February 26th a flock of six, consisting of three drakes and three ducks, was seen on the river Thurne (Saunders).

LEACH'S FORK-TAILED PETREL (*Oceanodroma l. leucorrhoa*).

On November 1st one of these little birds, a male, was caught at Diss, over twenty miles from the coast.

GREAT NORTHERN DIVER (*Colymbus immer*).

On November 18th an immature female was killed at Oulton (E. C. Saunders).

BLACK-THROATED DIVER (*Colymbus a. arcticus*).

This Diver is very much less common on our coasts and inland waters than the Red-throated. On January 11th one was picked up dead upon the beach at Hemsby by Miss Ferrier, and during October another immature example occurred at Cley (Pashley).

OYSTER-CATCHER (*Hæmatopus o. ostralegus*).

Between thirteen and fourteen pairs of Oyster-Catchers nested on the Norfolk coast this year (*Trans. N. & N. Nat. Soc.*, XI., p. 426), one of the nests at Blakeney Point containing six eggs.

RUFF (*Philomachus pugnax*).

Ruffs and Reeves visited Norfolk in considerable numbers during both the spring and autumn migration. Several were seen in the Broads district on March 24th, where the main arrival seems to have taken place on April 9th (J. Vincent). Although they remained in this locality for over a month, hopes that they would nest with us were unfulfilled, and all were gone by the middle of May. On the north coast three pairs were observed between May 3rd and May 10th (E. Ram), and a Ruff and two Reeves at the end of June (T. A. Coward).

By the middle of July they reappeared in considerable numbers upon the coast, where they were seen daily until the end of the month (E. Ram).

On September 16th Capt. L. Lloyd and I watched seven feeding close together on a marsh near the coast, besides seeing many others; in fact, on this day, with the exception of Dunlin and Curlew-Sandpipers, there were, I believe, more Ruffs and Reeves on this marsh than any other waders.

CURLEW-SANDPIPER (*Calidris ferruginea*).

On July 29th five Curlew-Sandpipers still in summer plumage were seen by E. Ram on Cley Marshes, where throughout September large numbers were to be seen in company with Dunlins.

LITTLE STINT (*Calidris minuta*).

On June 26th a Little Stint in summer plumage was seen at Cley by Miss Turner and Mr. Coward (*Brit. B.*, XVII., p. 66), and during September several were observed in the same locality.

TEMMINCK'S STINT (*Calidris temminckii*).

Two Temminck's Stints were obtained at Cley, one on September 1st and one on September 3rd (Pashley and E. Ram).

GREEN SANDPIPER (*Tringa ochropus*).

The Green Sandpiper, which has occurred in Norfolk in every month in the year, was this year reported in January, September and October, at Taverham (L. Lloyd), on May 19th at Hickling, and in October at Cley.

SPOTTED REDSHANK (*Tringa erythropus*).

More Spotted Redshanks than usual visited Norfolk during the past year. On July 19th one was seen at Hickling, and

on August 17th one at Cley (E. Ram). On September 20th three were shot at Cley (Pashley). On September 27th some more identified at the same place. A very unusual record is that of one both heard and seen at Cley on December 19th by E. Ram, who is, however, so experienced an observer that there can be no doubt, I think, as to the correctness of his identification.

RED-NECKED PHALAROPE (*Phalaropus lobatus*).

I learn from Mr. Pashley that a Red-necked Phalarope was obtained at Cley on November 9th.

BLACK-TAILED GODWIT (*Limosa l. limosa*).

It must be many years since the Black-tailed Godwit, long lost to Norfolk as a breeding species, has visited us in such numbers on migration, as it has done during the present year. In past years it has occurred most frequently in the neighbourhood of Yarmouth, and the largest visitation of which I can find a record was in the year 1896, when nine were killed on Breydon in August and September, and out of twelve seen, a somewhat hostile reception, to say the least of it! This year it has been on the N.W. coast that they have mostly occurred, the attraction, no doubt, being the recently flooded marshes at Cley. One was seen on June 12th by R. Pinchen at Blakeney, and one, probably the same bird, by the writer at the same place on June 14th. One appeared at Cley on July 26th (E. Ram), and was joined by two more on the 27th. On July 31st there were seven on this same marsh (E. Ram), and on August 5th five. On August 13th one was reported in the Broads district, and on September 19th two were again seen at Cley, whilst on 20th one was unfortunately killed in the same locality.

BLACK TERN (*Chlidonias n. niger*).

"Black Terns in ones, twos and threes were seen on the north coast on and off throughout the summer." (S. H. Long, *Trans. N. & N. Nat. Soc.*, XI., p. 425.) They were present well into October, and on October 8th I watched an immature bird hawking over a marsh.

SANDWICH TERN (*Sterna s. sandvicensis*).

Though it is probable that the Sandwich Tern nested on the Norfolk coast in 1893 and 1895 (*Zool.*, 1894, p. 88, and 1896, p. 174), the first authentic record of its doing so was in 1921 when two pairs nested at Blakeney Point. In 1922 a second colony was formed elsewhere, and about 100 nests were recorded. This year a further extension took place, and in

these three colonies over 500 pairs have nested. As pointed out by Mr. C. Borrer (*Brit. B.*, XVII., p. 189), only about 10 per cent. of these nests contained more than one egg, and not a single clutch of three was discovered.

ROSEATE TERN (*Sterna d. dougallii*).

The Roseate Tern appears to have visited the Blakeney Tern colony from time to time during the nesting season for a number of years. I have notes of it having been observed there in the years 1896, 1897, 1902, 1903, 1908, 1911, 1913 and 1914. Last year a pair was believed to have nested in the colony, but I think it is, to say the least of it, extremely doubtful whether the nest containing three eggs, the photograph of which was reproduced in the *Trans. N. & N. Nat. Soc.* (XI., p. 306), really belonged to these birds. This year they again put in an appearance, and on June 14th I was fortunate enough to see three pairs upon the wing at the same time. Mr. T. A. Coward, who stayed on the Point during the last ten days of June, wrote to me that he saw "at least one pair" upon many occasions. In spite, however, of prolonged observation on the part of R. Pinchen, the watcher, the birds could not be marked down to a nest—a matter of some difficulty in a colony of this size, and neither Mr. Coward, nor other ornithologists who visited the Point, could obtain satisfactory evidence that they nested.

ARCTIC TERN (*Sterna paradisæa*).

Last year, as recorded by Mr. J. H. Gurney (*Brit. B.*, XVI., p. 237), the Arctic Tern nested at the Blakeney Tern Colony. This year they did so in increased numbers, Mr. T. A. Coward during his visit at the end of June estimating that there were at least ten pairs (*Trans. N. & N. Nat. Soc.*, XI., p. 427). At Wolferton also Dr. C. B. Plowright identified an Arctic Tern which he watched on to its nest (*t.c.*, XI., p. 429).

LITTLE GULL (*Larus minutus*).

On June 17th Miss Turner and Mr. T. A. Coward watched an adult in full summer plumage at Hickling, whilst on June 26th an immature bird was seen by the same two observers at Cley (T. A. Coward, *Brit. B.*, XVII., p. 66). On November 10th one was seen at Cley by E. Ram.

LITTLE AUK (*Alle alle*).

Several Little Auks were obtained on the coast during November, their first appearance being on November 7th, the same day that the big rush of migratory birds took place, but there was nothing approaching to a "wreck."

NOTES

BONES OF STARLING FOUND IN A ROMAN URN IN HEREFORDSHIRE.

LAST summer (1923) Mr. Whiting of Magna Castra Farm, near Hereford, disturbed a Roman burial—a not uncommon occurrence on his property. Among the charred bones were two small urns about six inches high. One of these urns was intact and inside it were a number of bird-bones. The bones were submitted for examination and pronounced by Dr. P. R. Lowe to be those of a Starling (*Sturnus vulgaris*), and this identification was confirmed by Mr. W. P. Pycraft.

Near the same place are a great number of birds' leg-bones which have been identified as those of domestic fowls, and it is curious that all these bones are cocks', the spur remaining on each one.

H. A. GILBERT.

HAWFINCH IN RENFREWSHIRE.

ON February 16th, 1924, I came across a Hawfinch (*Coccothraustes c. coccothraustes*) in a garden at Kilmacolm. Mr. Thornton Mackeith confirms that it is the first recorded in Renfrewshire.

R. O. BLYTH.

LATE IMMIGRATION OF SKY-LARKS INTO KENT.

AT the beginning of January, 1924, I was assured by the watchers at Dungeness that flocks of Larks (*Alauda arvensis*) had been coming over from the east right to the end of the year. On the afternoon of 2nd January I saw a party of about twenty arriving from about east-south-east, the direction commonly followed during the autumn migration. On the 4th I had a close view of a Lark on the beach which looked so very pale in colour, and had such broad white edgings to its feathers, that I think it may probably have been an Eastern Skylark (*A. a. intermedia*).

I expect the prolonged and acute cold of eastern and central Europe had led to a prolongation of the period of migration, and the same cause probably accounted for the presence of immense quantities of Ducks of many species, especially Wigeon, and of Dunlin and other waders, which were to be seen on the sands and the sea and pools in far greater numbers than I have known in other winters.

H. G. ALEXANDER.

WAXWINGS IN IRELAND.

A VERY interesting account has been sent me by Miss Gladys Moss of the occurrence of a Waxwing (*Bombycilla garrulus*) at Ballybrack, co. Dublin, on January 11th, 1924. The bird, an adult, allowed my informant to approach within three yards of it, and during part of the time it was under observation it fed voraciously on the berries of an arbutus.

Mr. J. P. Carrigan, of Thurles, co. Tipperary, has given me details of an adult which was seen and captured on his tennis court there on January 25th, 1924. The bird only lived a few days in confinement, the specimen being then sent to Messrs. Williams & Son, Dublin, for preservation.

The last recorded occurrence of the Waxwing in co. Dublin is that referred to in the *Birds of Ireland* (p. 46), the date being January 21st, 1851. Mr. W. J. Williams, however, informs me that one or two specimens from co. Dublin, not recorded at the time, have passed through his hands since then, including a very fine adult male from Balbriggan procured in the eighties. There appears to be only one previous record for co. Tipperary, and in this instance no date is given (cf. *Birds of Ireland*, p. 45).

GEO. R. HUMPHREYS.

WAXWINGS IN ENGLAND.

WE have been informed of the following recent occurrences of the Waxwing in England: One at Cumnor, Berkshire, on November 26th, 1923, reported by Mr. G. Tickner; one at Yarmouth on December 5th, 1923, and two seen at Keswick, Norwich, on February 7th, 1924, and reported to Mr. G. Gurney, who kindly informed us; one near Maidstone, Kent, on January 9th, reported to the Rev. J. R. Hale, who kindly informed us; one at Beckenham, Kent, on March 1st, reported by Mr. H. A. A. Dombrain.—EDS.

WINTER BREEDING OF WREN.

A PAIR of Wrens (*Troglodytes t. troglodytes*) which occupied a nesting-box fastened to a tree in Miss Blunt's garden at Meole Brace, Shrewsbury, hatched out a brood, and were seen feeding the young on December 3rd, 1923. Although the weather then was bitterly cold, the preceding weeks had been very mild.

A still more remarkable instance of winter breeding has occurred at Churchstoke, Montgomeryshire. A little girl reported to the schoolmaster—Mr. George Mountford—that a pair of Wrens were building a nest in a wall. They were first

noticed on December 30th, 1923. During the ensuing three weeks they finished the nest and laid five eggs, but soon afterwards deserted, probably on account of the cold weather. Mr. Mountford then sent me the nest as well as the eggs, which were undoubtedly fresh. H. E. FORREST.

WOODPECKERS AND PINE-CONES.

ON October 20th, 1919, I watched for a considerable time a Great Spotted Woodpecker (*Dryobates major*) which had jammed a fir-cone between two snags of a fir-tree, and energetically hacked it. After a time the bird flew to the ground, picked up a cone, placed it firmly in a cleft of the bark, and then attacked it vigorously. It flew repeatedly to the ground, which was covered with cones, and brought back one, placing it in the cleft as before and recommencing its operations. I watched the bird for more than half an hour, using my prismatic glasses, although this was hardly necessary, the distance being very short and the bird showing no sign of shyness, although it saw me. The scene was a lonely spot in a wooded portion of the dunes near Haarlem, Holland.

A. E. H. SWAEN.

By a curious coincidence, since writing my former note (*antea*, p. 245), I have again seen a Great Spotted Woodpecker (*Dryobates m. anglicus*) feeding on cones, this time in north Worcestershire, in a plantation of Scots pine (*Pinus sylvestris*). I was passing the plantation on March 6th when a Great Spotted Woodpecker flew across the road. On going into the plantation I heard something pulling at a cone, and saw the bird on a cone near the top of the tree. Unfortunately I frightened it off almost at once; it soon returned, but I could not stay to watch it, and it did not send anything down to the ground while I was in the plantation. The ground was strewn with cones that had been picked bare, and with scattered seeds. These cones were all recently worked but I cannot be certain that the Woodpecker worked them.

H. G. ALEXANDER.

DURING the last few days (March 1924) I have been watching, at close quarters, a Great Spotted Woodpecker feeding on fir-cones at South Wootton, King's Lynn, Norfolk. About two months ago I saw a pair of Crossbills in my wood, and on looking around under the fir trees I found a lot of worked cones, and immediately thought that the Crossbills had been about for some time and that I had overlooked them. After this I kept a good look-out, but never saw or heard the

Crossbills again. Every day I found freshly worked cones under the trees, and this fact mystified me until I read Mr. Bunyard's interesting note in the February number of *British Birds*.

There seemed to be about ten feeding places along a belt of Scotch firs on the boundary of my wood, and there were more along a belt on the opposite side of the road. I found out what seemed to be one of the favourite feeding trees and one day I saw a Great Spotted Woodpecker fly away from it.



CONE PLACED IN POSITION IN CLEFT BY GREAT SPOTTED WOODPECKER
WITH A WORKED CONE AT SIDE.

I built a hide under a Scotch fir near by, but had to wait for several mornings before my patience was rewarded with a good view. On the morning of March 8th I went into the hide at about 8 o'clock. At about 8.30 a Great Spotted Woodpecker flew into the feeding tree calling loudly, and still calling it flew into the tree under which I was hiding. In about two minutes it was back in the feeding tree with a cone, which it held by the stalk, in its bill. There was evidently already a cone in the hole as it threw a cone over its right shoulder, fixed the fresh cone in place and attacked it with strong rapid blows. The tapping noise it made was

loud enough to be heard clearly over 100 yards away, and resembled the noise a Woodpecker makes when excavating its nesting hole. It worked on the cone for about five minutes, then suddenly left it and flew into the tree above my head, and in two minutes was back again with a fresh cone in its beak. As before, it jerked the old cone out over its right shoulder, and fixed the fresh one in the hole. I noticed that every now and then it stopped tapping for a few seconds and turned the cone round in the hole so as to get at a fresh part. Altogether I saw it fly three times into the tree above my head, and each time it took a fresh cone to the hole and threw the old one out. I noticed that each time the cone described the same arc as it was thrown over the bird's shoulder; also every time it took two minutes to get a fresh cone and five minutes to work it. At the time, I could not see what the Woodpecker did with the fresh cone while it was dislodging the old one; and I spent about an hour in my hide every morning, but without success, until March 13th. I went into my hide at about 7.30 a.m., and had not been there long before I heard the Woodpecker tapping quite close to me. I looked down towards the foot of the tree in which I had seen it working on the 8th, and saw that it had wedged a cone in a cleft in the bark about six inches from the ground. The bird was only about thirty feet from me, and the sun was shining right on it, so I got an excellent view of the whole process. I could see it take the seeds out and eat them, and saw the seed-wings fluttering to the ground. Every now and then it caught the cone by the apex, took it out of the cleft and re-arranged it. After a few minutes it dropped to the ground and walked about. It picked up a partly worked cone, flew on to the tree again, tucked the new cone between its breast and the trunk, caught hold of the old cone by the apex, jerked it over its shoulder, took the new cone by the apex, drove it into the cleft and started to work it. After a few minutes it dropped to the ground again, walked about, picked up another cone, went back to the cleft, tucked the cone between its breast and the tree and tried to jerk the old cone out. This time it appeared to experience some difficulty, so it picked up the new cone from between its breast and the tree, and climbing about a foot further up the trunk fixed it in another cleft and worked at it for a few minutes. It again dropped to the ground, picked up another cone, flew back to the second cleft, then seemed to change its mind, walked down backwards to the first cleft and holding the new cone as before, jerked out

the old one, fixed the new one in, and after working on it for a few minutes it flew right away. I found that the favourite feeding time seemed to be from 6.30 a.m. to 9.30 a.m.; they also feed again between 4.30 and 5.30 p.m.

I made a careful search all along the belt of firs in my wood, and the wood on the opposite side of the road, and altogether found over twenty different feeding places. They varied in height from six inches to fifty feet from the ground, most were in Scotch firs, but three were in silver birches, and one was in an oak tree. Some of the holes were merely clefts in the bark of Scotch firs, but these had been shaped up by the Woodpeckers. Some of the holes were natural holes in the main trunk of the Scotch firs, but most of them had been enlarged and shaped by the bird. Some of the holes were in the upper side of horizontal branches, and some right in the tips of perpendicular branches. One dead Scotch fir had a groove two and a half feet long cut in it, with a cone fixed right at the bottom. All the clefts and holes when found had a cone fixed in, and one contained two cones. All the cones were either upright or at an angle of 45 degrees, and were fixed in very firmly. The distance between the first and last feeding place along the belt is about one-third of a mile.

I do not think that this is a new habit of the Woodpeckers, but should say that they only feed so freely on fir-cones in very severe weather when there is a shortage of other food. In another corner of my wood I found a very ancient worked cone wedged into a hole in a birch stump, and this was most probably a relic of some other severe winter.

The Woodpeckers appear to attack larger cones than the Crossbills do, also the scales of the Woodpecker cones are more split open than the others. There is also a slight difference in the stalks, although they are about the same length in each kind of cone; the Crossbill ones seem to be cut straight through as though they were cut with sharp pliers, and the others are cut obliquely as though cut with blunt shears. This is more noticeable when the cones are fresh.

On March 21st for the first time I had an excellent view of the Woodpecker cutting a cone off the tree. The bird was working at a cone fixed in a cleft on the upper side of a dead branch about fifty feet up an oak. It suddenly left the branch, and flew into a Scotch fir nearby, turned upside down under a cone, struck the stalk a few blows with its beak, seized the cone, wrenched it off and flew back to the cleft; the whole process taking about two minutes. N. TRACY.

I FIND in my notes for 1882, the following: "I saw this species (Great Spotted Woodpecker) negotiating a fir-cone. I had hitherto been unaware of the fact that this was included in their diet. Having detached the cone from the branch, the Woodpecker flew with it in its beak to a neighbouring dead branch, where I had a good view of his operations. The branch was nearly vertical, and he clung firmly with one foot, holding the cone in the strong grasp of the other, while he hammered away with his beak to get at the seeds, which lie at the base on the inside of each plate of the cone. In such a position the strong stiff tail-leathers were invaluable as a support. I watched him for about a quarter of an hour, and then threw up a stone to make him drop his cone for my examination. I found that he had not nearly finished it. The plates were not broken off, but were forced apart to enable him to get at the seed lying at the base of each one, so that when done the cone is left with the plates still on, but sticking a little outwards."

This took place in the South of Sweden, and I think that my recollection is correct when I say that the cone in question was that of a spruce fir.

G. E. LODGE.

GLOSSY IBIS IN CO. CORK.

A VERY fine adult female Glossy Ibis (*Plegadis f. falcinellus*) has been received for preservation by Messrs. Williams & Son, the well-known Dublin taxidermists. It was shot on Annagh Bog, Churchtown, co. Cork, on February 21st, 1924, by Mr. J. G. Shepherd. Mr. W. J. Williams, who kindly showed me the specimen, informs me that this is the first adult he has received from Ireland. Out of about forty specimens previously recorded from the country only one, from co. Longford prior to 1833, is described as an adult (Thompson, *Nat. Hist. of Ireland*, Vol. II., p. 182).

GEO. R. HUMPHREYS.

GARGANEY BREEDING IN ESSEX.

ON April 29th, 1923, I was bird watching on a broad expanse of Essex marshland. There were present a good many Mallard, Shoveler, Teal and Sheld-Duck, some in pairs and others in small flocks consisting mostly of drakes.

There was one solitary duck or drake sitting in a field of long grass. Its head was visible, but the distance was too great to distinguish it, and the body of the bird was hidden by the grass. The only definite observation I made was that the bird must be considerably smaller than a Mallard.

To get to this piece of ground necessitated a detour round several broad ditches and when I arrived the bird had gone unobserved. I searched the field for some time and presently flushed a duck, rather larger than a Common Teal. There were eleven eggs in the nest, slightly incubated, and from the down and feathers I judged the species to be Garganey. I sent some of the down and flank feathers together with one egg to Mr. P. F. Bunyard, who identified them as Garganey (*Anas querquedula*), thus confirming my own observations.

So far as I can find this is the first authentic record of the Garganey breeding in Essex. H. R. TUTT.

OIL-CLOGGED COMMON SCOTERS INLAND IN SUSSEX AND HAMPSHIRE.

On February 16th, 1924, my daughter picked up a fine male Common Scoter (*Oidemia nigra*), recently dead, on the bank of the mill-tail at Sayers Common, Sussex, about nine miles from the sea. Its lower breast-feathers were clogged with oil, but otherwise it seemed in good condition.

I took it to Pratt's shop in Brighton to be preserved and found him completing the setting up of another male Common Scoter, which had been sent him from Godalming, with almost all its plumage clogged with oil. Mr. Oswald H. Latter, who sent him that bird, has very kindly given me the particulars. It was picked up dead about January 3rd at East Liss, Hampshire, by his brother-in-law, Mr. J. S. Gamble, F.R.S., in his woods there, about fourteen miles from the sea.

One fears that nothing will effectually prevent the seafaring population from carelessly allowing oil to escape into the sea. But the effects are still disastrous to bird life.

I do not recollect hearing of Scoters being found inland except during the breeding season, and suppose that it was their efforts to rid themselves of this filthy encumbrance that may have brought them inland to die. A. F. GRIFFITH.

[The Common Scoter is infrequent on inland waters in winter.—EDS.]

SMEWS AND OTHER WILD-FOWL ON THE CONWAY ESTUARY.

MR. A. HAMILTON, of Deganwy, tells me that during the rough weather which prevailed in November, 1923, many species of Ducks which usually keep out on the sea, resorted to the more sheltered waters of the Conway Estuary. Common Scoters (*Oidemia nigra*) were very numerous, and there were

also a good many Red-throated Divers (*Colymbus stellatus*), Golden-eyes (*Bucephala clangula*), Mergansers (*Mergus serrator*) and Sniews (*M. albellus*). Among the latter were several adult males, the first he had ever seen on these waters. On December 22nd five wild Swans flew down the river; from their small size, he concluded that they were Bewick's (*Cygnus bewickii*).
H. E. FORREST.

BIRDS ON NORTH WORCESTERSHIRE RESERVOIRS,
1922 AND 1923.

THE following birds, with one exception all observed at the Upper Bittell reservoir, in 1922 and 1923, may be worth recording.

1922. May 7th. One Curlew-Sandpiper (*Calidris ferruginea*) amongst a party of the usual small waders that appear each spring and autumn.

May 16th. One Common Tern (*Sterna hirundo*).

August 29th. One Curlew-Sandpiper at least, in a party of waders.

October 17th. Two Gadwalls (*Anas strepera*). They arrived on the reservoir whilst I was watching the Ducks.

November 21st. When I reached the reservoir two Kittiwakes (*Rissa tridactyla*), an adult and an immature bird, were flying over the water. They soon departed in a west-north-westerly direction. A few minutes later a Dunlin flew round the reservoir and departed in the same direction. Then another small Gull, possibly only Black-headed (*L. ridibundus*) but I think a Kittiwake, flew along the far side of the reservoir from me and also went away to the north-west. All this was between 10 and 11 a.m. on a rather dull and hazy day with no wind. Similar weather had prevailed for some days, without a trace of the storms that are sometimes held responsible for driving maritime species inland. Besides the Kittiwakes, on the same day three immature Scoters, all with very pale face-patches, were swimming and diving on a smaller reservoir just under the Lickey Hills. I timed their dives for about ten minutes. The period under water varied from 43 to 54 seconds; the period above water from 12 to 35 seconds.

From December 21st, 1922, to February 20th, 1923, I saw a single Goosander (*Mergus merganser*) whenever I visited the reservoir.

1923. February 6th. Five Sheld-Duck (*T. tadorna*).

April 12th. One Sandwich Tern (*S. sandvicensis*).

September 27th. One Dusky Redshank (*Tringa erythropus*). This is interesting in connection with the other records from western counties about the same time.

H. G. ALEXANDER.

RINGED PLOVER NESTING AMONG POTATOES.

A SANDY beach at the east end of St. Mary's, the Isles of Scilly, is a favourite nesting site of the Ringed Plover (*Charadrius h. hiaticula*). During the winter of 1921 part of the beach was enclosed and a mixed crop of potatoes and arums grown there. During 1922 the birds returned and nested among the potatoes, showing no fear of the regular workers there, both young and parents running about almost under their feet. The advent of a stranger, however, caused the usual alarm with the squatting of the chicks. In 1923 they had returned to nest on the open beach. H. W. ROBINSON.

REDSHANK BREEDING IN SURREY.

With reference to Mr. Bunyard's remark (*antea*, p. 205) that the nest he found of the Redshank (*Tringa t. totanus*) was the second recorded instance of the Redshank breeding in the county, it should be of interest to record that I know of one locality in Surrey where the Redshank breeds regularly (as I discovered in 1922 and 1923) in some numbers; it is in fact almost the commonest bird at the spot in question.

M. S. CURTLER.

DISTINCTIONS OF AMERICAN SNIPE AND ITS OCCURRENCE IN BRITAIN.

At the meeting of the British Ornithologists' Club held on February 13th, 1924, Colonel R. Meinertzhagen made some remarks on the differences between the Common Snipe (*Capella g. gallinago*) and the American Snipe (*Capella g. delicata*) and at the same time exhibited a Snipe shot in South Uist, Outer Hebrides, on October 26th, 1920, which had all the characters of the American bird and was in his opinion an example of that race. Colonel Meinertzhagen also considered this to be the first authentic record from Europe (see *Bull. B.O.C.*, Vol. XLIV., pp. 58-61).

As this record has great interest to students of *British Birds* and may lead to the discovery of further examples of this Snipe we give here by kind permission a précis of Col. Meinertzhagen's remarks and are also permitted to reproduce photographs of two sets of feathers, the one of axillaries taken from 22 British and 15 American Snipe and the other of

outer tail-feathers taken from 18 British and 17 American Snipe, which were collected and arranged by Col. Meinertzhagen and exhibited at the meeting referred to.

In all 127 Common Snipe (*Capella g. gallinago*) and 64 American Snipe (*C. g. delicata*) were critically examined by Col. Meinertzhagen and the following are his conclusions:—

Number of tail-feathers.—In the Common Snipe the rectrices usually number 14, but as few as 12 and as many as 18 have been recorded.

In the American Snipe the number of rectrices seems to be constantly 16. This difference is therefore merely an indication, and cannot be taken as a reliable character.

Markings on outer tail-feathers.—Seebohm states that there are usually three bars on the outer rectrices of the Common Snipe and five on those of the American form. This is not confirmed. In American Snipe the barring is narrower and there are consequently more bars, frequently as many as seven. This number is also occasionally reached by European birds.

Barring on axillaries.—Western examples of the Common Snipe usually have well-barred axillaries, the amount of white generally exceeding the amount of dark. About 8 per cent. of birds examined have white axillaries with a few black marks either in the form of rudimentary bars or longitudinal marks. Pure white axillaries are very rare. The further east one goes, the more predominant becomes white in the axillaries. Well-barred examples from Eastern Asia are not the rule.

In the American Snipe the barring on the axillaries is invariably, as far as it was able to be ascertained, heavy, dark, and clean-cut, the black bars always equalling and usually exceeding the white bars in breadth. European Snipe frequently have axillaries indistinguishable from those of the American bird, and the character can only be termed indicative.

Markings on breast.—Seebohm states that in the American Snipe the breast-markings are transverse, whilst in European birds they are longitudinal. This is not a sure character, as in at least 10 per cent. of American birds examined the marking on the breast is longitudinal. Moreover, transverse barring on the breast does occasionally occur in European examples, though it is admittedly rare.

This character can therefore only be indicative.

Length of culmen.—Only males will be considered. Hartert gives the measurement of the culmen of Common Snipe as



Half nat. size.

OUTER TAIL-FEATHERS FROM (above) 18 BRITISH SNIPE (*Capella g. gallinago*), (below) 17 AMERICAN SNIPE (*C. g. delicata*).

(Photographed from feathers arranged by Col. R. Meinertzhagen.)



Half nat. size.

AXILLARY FEATHERS OF (above) 22 BRITISH SNIPE (*Capella g. gallinago*), (below) 15 AMERICAN SNIPE (*C. g. delicata*).

(Photographed from feathers arranged by Col. R. Meinertzhagen.)

69-79 mm. (In all cases culmen-measurements have been taken from junction of culmen with skull, and where it has been measured by authors from feathers 5 mm. has been added as compensation.) The *Handbook of British Birds* gives the measurement of 12 males as 65-73 mm. Eleven British-taken males in our collection have the culmen 67-77, and 11 males from Eastern Asia have the culmen 63-79. If we, for the moment, disregard the doubtful race "*raddei*," we then have the culmen of European Snipe varying from 63-79 in a large series. These measurements are confirmed by the vast series from throughout the Palearctic Region and Africa in the British Museum.

Twenty-two males of the American Snipe in the British Museum have the culmen measuring 64-73. Ridgway gives the culmen of 18 American males as 62.5-72.5 mm.

All we can say of this character is that the culmen of the American Snipe does not exceed 73, whereas that of the Common Snipe ranges up to 79 mm.

Breadth of outer tail-feathers.—In the European bird, at 20 mm. distance from the tip of the outer tail-feather, the breadth of the feather is rarely less than 10 mm., whereas in the American bird it rarely, if ever, exceeds 9 mm., a very slight difference, but considerable when applied to such small objects.

Of 40 European Snipe the largest breadth is 12.5 mm. and the smallest 8 (once), then 9.5 mm.

Of 40 American Snipe the broadest is 9 mm. and the narrowest 4 mm.

As far as one can see, the breadth of the outer tail-feather is the only sure character in the American Snipe which is not shared by European birds.

Colonel Meinertzhagen gives the following details regarding the Snipe (a male) mentioned above from S. Uist. :—

- (1) Number of tail-feathers 16.
- (2) Barring on the outer tail-feathers close.
- (3) Axillaries dark and clear-cut, the black bars equalling the white bars.
- (4) Breast-markings transverse.
- (5) Culmen 67 mm., coming well within the measurement of American birds.
- (6) Breadth of the outer tail-feather at 20 mm. from its tip 8 mm.

A supposed example of the American Snipe was recorded by E. H. Rodd as having been shot in Cornwall in January, 1838 (*Zool.*, 1872, p. 3,149). This bird Mr. Harting (*t.c.*,

p. 3,273) dismisses as a Common Snipe with 16 tail-feathers, stating that it had a long and stout bill, broad outer tail-feathers and axillaries coloured like a British bird. Mr. Harting goes on to record a specimen killed at Taplow Court, Bucks, in August, 1863, which he considers to be the American bird. This bird had, however, only 14 tail-feathers and August is an unlikely month for the occurrence of an American example.

H.F.W.

LITTLE GULL IN IRELAND.

IN 1920 Mr. Sheridan of Dugort, Achill, informed me that he had shot a specimen of *Larus minutus* in January, 1919.

He stated that there was hard frost and snow at the time. The bird was mounted for him by Messrs. Gerrard. This is the first recorded instance of the Little Gull in co. Mayo, and only the thirteenth recorded appearance of this rare Gull in Ireland.

ROBERT F. RUTTLEDGE.

IVORY-GULL IN GLOUCESTERSHIRE.

A FINE adult Ivory-Gull was shot at the end of January, 1921, on the River Severn, near Gloucester. The bird is in my collection and has not, I believe, hitherto been recorded.

F. H. L. WHISH.

TWO HEN SPARROW-HAWKS LAYING TOGETHER.—In the *Field*, May 24th, 1923, p. 756, there is a note from F. R. S. Balfour of Dawyck in which he states that on May 11th his keeper, Robert Young, shot a cock and two hen Sparrow-Hawks (*Accipiter n. nisus*) beside one nest in a larch tree in the Glen of Scrape, Stobo, Tweeddale. The nest contained ten eggs, and one of the hens was about to lay another. The two clutches of eggs in the nest were easily distinguishable by their markings. The evidence in this case seems to be quite clear. Similar cases of three birds in attendance on one nest are on record with regard to fifteen species of birds on the British List. Among the Accipitres, an almost exactly parallel case is on record of two female Kestrels apparently laying together. In the *Zoologist*, 1882, p. 267, the Rev. M. A. Mathew states that his nephew brought in a Kestrel's nest in N. Devon, and stated that there were two females and one male Kestrel in the tree from which he took it. There were six eggs in the nest, four of a dark type and two of the ordinary character, differing widely in appearance. I have also evidence of a single male Hen-Harrier (*Circus c. cyaneus*)

being paired with two females, but in this case the hens nested independently ; and this was also the case with two female Montagu's Harriers (*Circus pygargus*), apparently mated with one cock.

F. C. R. JOURDAIN.

COMMON BITTERNS IN SUSSEX AND ANGLESEY.—Mr. H. T. Gosnell informs us that an adult male Common Bittern (*Botaurus s. stellaris*) was shot by a fisherman in Pagham Harbour, Sussex, in January, 1924 ; while Mr. J. A. Pownall states that he flushed one, within thirty yards, on the 17th of the same month in Anglesey.

SMEW INLAND IN NORFOLK.—Mr. Gerard H. Gurney writes that a female *Mergus albellus* was shot out of a small stream at Swaffham on January 7th, 1924, by Captain R. G. Buxton.

GANNET INLAND IN ESSEX.—Mr. L. R. Hodson informs us that on December 15th, 1923, a Gannet (*Sula bassana*) was found in a field near Saffron Walden by a labourer, who knocked it on the head with a stick and killed it. It has been stuffed and is now in the Saffron Walden Museum. Mr. Hodson states that the bird is an adult, presumably in winter plumage, as the head and neck are only very faintly tinged with buffish-cream. According to Mr. Miller Christy's *Birds of Essex* only three specimens have previously been taken in this neighbourhood.

MANX SHEARWATER IN SHROPSHIRE.—Mr. H. E. Forrest informs us that he was told by Mr. J. G. Lang that a Manx Shearwater (*Puffinus puffinus*) fell down in the street in Ludlow on October 20th, 1923. It was picked up and released next morning when it flew away apparently none the worse.

BARTRAM'S SANDPIPER IN SCILLY ISLES.—Dr. G. C. Low, whose work on the *Literature of the Charadriiformes* is about to be published, has brought to our notice that we have omitted to refer in *British Birds* to a Bartram's Sandpiper (*Bartramia longicauda*) shot at Tresco, Scilly Isles, on September 22nd, 1922, by Major A. A. Dorrien-Smith. The bird was exhibited at a meeting of the British Ornithologists' Club, by Mr. N. B. Kinnear, on December 13th, 1922 (*Bull. B.O.C.*, XLIII., p. 76). This is the fourteenth recorded occurrence, if two found in poulterers' shops are accepted as good records, of Bartram's Sandpiper in the British Islands, and this record should also have been included in the additions in the *Practical Handbook*.



LETTERS



BIRDS REMOVING NESTING MATERIAL TO ANOTHER SITE.

To the Editors of BRITISH BIRDS.

SIRS,—We found the nest of a Grey Wagtail (*Motacilla c. cinerea*) in the spring of 1923. The eggs were eventually taken and the bird constructed another nest near by, and transferred the whole of the hair lining from the old nest to the new.

R. P. GAIT.

To the Editors of BRITISH BIRDS.

SIRS,—I would like to suggest with regard to Major W. M. Congreve's letter under this heading in the January number of *British Birds* (p. 192), that the fact of there being a good many resident Ravens, Hooded Crows and Magpies at Hammerfest, would be likely enough to account for the destruction of the nests and contents of the Mealy Redpolls in that neighbourhood. The Magpies nest under the eaves of the houses in the town, and it is no distance for them to go to the willow plantation in question. I have seen there as many as forty-two Ravens in the air at one time, all pretty much together; and I once saw one trying hard to catch a moulting Redwing, which was originally being hunted by a Magpie, which bird, however, sheered off as the Raven took up the pursuit. The Redwing ultimately escaped among the stones on the margin of the loch behind the town. Since then I have again seen a Magpie in full chase after a small bird.

GEO. E. LODGE.

THE "NORMAL" CLUTCH OF EGGS.

To the Editors of BRITISH BIRDS.

SIRS,—The January number of *British Birds* has just reached me. I was interested in the note by Mr. Borrer (p. 189) on the normal clutch of eggs of the Sandwich Tern and more particularly in his comment that he considers a single egg, and not two, to be the normal number. Some years ago I suggested in your pages that what constitutes a normal clutch for any given species in a specified district, might not necessarily prove to be normal for any other district. While Mr. Borrer is chiefly concerned with the frequency of occurrence of sets of three it seems to me that his other point, although but casually mentioned, is of equal interest.

I have run across many instances of local variation in the number of eggs to a clutch of different species, but have failed to find a satisfactory explanation for the fact. Four appears invariably to be considered the full number of eggs for the Golden Plover (*Charadrius apricarius*). In the Skipton district of Yorkshire I was so impressed with the complete absence of fours and the regular occurrence of threes, that when I noticed in Nelson's *Birds of Yorkshire* a photograph by Mr. Riley Fortune of a clutch of three, instead of the regulation four, I took the matter up with him. I was not surprised to learn that Mr. Fortune had deliberately selected the picture, because he considered three and not four to be typical of the West Riding. Howard Saunders evidently considered fours to be so characteristic that he does not even mention the possibility of threes in his *Manual*.

A friend of mine who has done a great deal of photographing and collecting on the Welsh coast, was greatly surprised when I inferred that four eggs was the general number for the Oystercatcher (*Haematopus ostralegus*). His experience of the species was confined to Wales, mine to Norfolk. He had found fours a rarity. I had found them in the majority.

Three is frequently stated to be the normal clutch for the Little Tern (*Sterna albifrons*). Of the hundreds of sets that I have seen on the Norfolk coast about 5 per cent. have contained three eggs, the rest two, while I have seen but one of four that were undoubtedly laid by one bird. There is no doubt that two is normal there, whatever may be the case elsewhere.

Of scores of nests of the Meadow-Pipit (*Anthus pratensis*) found on the Skipton Moors I never saw one containing more than four eggs, although many Tree-Pipits held more.

But the most striking instance I have personally noticed hails from this side of the Atlantic. Three years ago William MacDonald of this University returned from an expedition with the Imperial Oil Company to Great Slave Lake and brought with him some eggs for identification that appeared to me to be typical eggs of the Arctic Tern. But they were taken from a large colony on the east end of the lake in which not a single nest contained more than one egg. The next year Mr. MacDonald went to the west end of the lake and there found several more colonies of the same species with the characteristic single egg to a clutch. But the promised skins as well as more eggs went to the bottom with the canoe and outfit on the road home. Last year, however, MacDonald had better luck and safely brought down three skins from one of the colonies. They were quite typical *Sterna paradisæa*.

Since the single egg was found for three seasons in succession and in numerous colonies, it may be considered typical for the district. The reduction in number is rather interesting since it is contrary to expectation and renders a possible explanation more obscure.

WM. ROWAN.

UNIVERSITY OF ALBERTA, EDMONTON, ALTA., CANADA.

January 24th, 1924.

CUCKOOS' EGGS IN DOMED NESTS.

To the Editors of BRITISH BIRDS.

SIRS,—Having read Mr. Musselwhite's letter (*antea*, p. 252) with regard to the deposition of eggs of the Cuckoo (*Cuculus c. canorus*) in domed nests, I would like to give observations on two such nests; the following are from my note book for 1909:—

On May 15th I visited the nest of a Chiffchaff (*Phylloscopus c. collybita*) which I had found in Surrey when it was being built. The nest was placed in a tangled mass of dead bramble stems and undergrowth, which had evidently been cut down the previous winter and placed in a heap. I broke many of the bramble stems to approach the nest and then could not see the eggs inside. Only when I was carefully extracting the eggs to examine them did I find one was a Cuckoo's. The dome of the nest was perfect, and had any injury been done to the entrance I should certainly have been able to see the eggs after breaking away the brambles. The dense nature of the mass of brambles surrounding the nest would certainly have prevented a bird so large as the Cuckoo from clinging to the nest to deposit the egg.

On May 30th I flushed a Willow-Wren (*Phylloscopus t. trochilus*) on the North Downs in Kent. The nest was beautifully concealed and had the bird not gone off, I should never have found it. The entrance hole was quite small and I bent down the lower part of it to examine the eggs, when I found one was that of a Cuckoo; there were five eggs of the fosterer and all were in an advanced stage of incubation. In this case also the dome was intact. The nest was under a tuft of long grass; the entrance was no larger than is usual with this species.

A further case of a Cuckoo depositing an egg in the nest of a Linnet (*Carduelis cannabina*) may be of interest. The nest was in a very thick quick hedge that was constantly trimmed, and placed about three inches from the top. The Linnet's eggs were taken by my younger brother, who had replaced them by three greyish pebbles. The density of the hedge may be gauged from the fact that the Linnet when flushed had considerable difficulty in getting away. Two days later my brother reported to me that there was an egg similar in colour to the pebbles, but larger, in the nest. This was a Cuckoo's egg, and such was the position of the nest that any approach by a Cuckoo to "lay" in it was physically impossible. The Linnet's eggs were taken from above, one boy holding back the thorny twigs whilst the other carefully lifted the eggs with the finger tips.

I have had considerable experience of eggs of the Cuckoo with various fosterers, but these three instances seem to me to bear directly on the correspondence you have published on this subject.

H. R. TUTT.

To the Editors of BRITISH BIRDS.

SIRS,—As well observed facts on this subject should be placed on record, I should like to recount my only two experiences (both in Sussex) of finding a Cuckoo's egg in a domed nest.

On June 24th, 1921, I found a nest of a Wren (*Troglodytes t. troglodytes*) containing a Cuckoo's egg, but no fosterers, in a quickset hedge by a roadside. I did not disturb either nest or egg more than I could possibly help, beyond inserting a couple of fingers into the entrance hole, as I hoped to obtain one or two of the fosterers' eggs subsequently. On revisiting this nest the two following days, I found it had been deserted. The nest, when I first discovered it, appeared very knocked about.

On May 17th, 1923, when accompanied by the Rev. William Serle, and Mr. James Dyson, I found a nest of a Chiffchaff (*Phylloscopus c. collybita*) containing four eggs of the fosterer and one of a Cuckoo. We all three inspected this nest most carefully. It was about 18 inches from the ground and as well concealed amongst brambles and growing vegetation as this bird's nest usually is. It was absolutely undamaged, neither did the vegetation growing up between the brambles appear to be unduly disturbed.

On visiting the nest the following day, it was obviously deserted, all five eggs being stone cold. These two records are absolutely contradictory: which is as I should expect them to be. The more one studies the habits of birds, the less one can dogmatize. This applies to every problem one is confronted with in the field.

WESTBOURNE.

CECIL SMEED.

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS.

which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND.

TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.



F. H. L. WHISH,
LYMPHAM, SOMERSET.



The Birds of Portugal

By WILLIAM C. TAIT, F.Z.S., M.B.O.U. Demy 8vo., with photographs and a map in colours, 18/- net

The Bird as a Diver

A contribution to the Natural History of Diving Birds. By JOHN M. DEWAR, M.D. Demy 8vo., 10/6 net

The Literature of the Charadriiformes

From 1894 to 1924. By G. C. LOW, M.A., M.D., M.R.C.P., F.Z.S., M.B.O.U. Demy 8vo., 12/6 net

A Check-List of British Birds

Compiled from "A Practical Handbook of British Birds," by H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U. Demy 8vo., Paper covers 3/- net. Stiff Boards, 3/6 net

Kilimanjaro and its People

A History of the Wachagga, Their Laws, Customs and Legends. By the HON. CHARLES DUNDAS, O.B.E. (Senior Commissioner Tanganyika Territory). Demy 8vo., numerous photographs, 18/- net

The Peaks, Lochs and Coasts of the Western Highlands

Penned, and Pictured with one hundred photographs, by ARTHUR GARDNER, M.A., F.S.A. Demy 8vo., 15/- net

White and Black in East Africa

By HERMANN NORDEN, F.R.G.S., Author of "From Golden Gate to Golden Sun." Demy 8vo. Photographs and maps, 15/- net

Deer Stalking in Scotland

By ALEXANDER I. MCCONNOCHIE, F.Z.S., Author of "The Deer and Deer Forests of Scotland," etc. With an Introduction by The DUKE OF ATHOLL, K.T. Demy 8vo. Illustrated, 10/6 net

Vivarium and Aquarium Keeping for Amateurs

A Practical Guide to the Hobby. By A. E. HODGE, F.Z.S. Crown 8vo., with photographs, and text illustrations, 5/- net

The Irish Setter

Its History and Training. By COLONEL J. K. MILLNER. With an Introduction by S. W. CARLTON. Crown 8vo., with photographs, 5/- net

A Romance of the Rostrum

Being the Business Life of Henry Stevens, and the History of Thirty-Eight King Street, with some accounts of Famous Sales held there. Compiled by E. G. ALLINGHAM, with a Preface by The Right Hon. LORD ROTHSCHILD, F.R.S. Demy 8vo., with photographs, 20/- net

BRITISH BIRDS

AN·ILLUSTRATED·MAGAZINE
DEVOTED·CHIEFLY·TO·THE·BIRDS
ON·THE·BRITISH·LIST

MAY 1.
1924.

Vol. XVII.
No. 12.



MONTHLY·1s9d·YEARLY·20s.
·326HIGH·HOLBORN·LONDON·
·H·F·&·G·WITHERBY·

NATURELAND.

The Illustrated Magazine of Natural History.

THE MAGAZINE YOU HAVE BEEN LONGING FOR.

"It is the kind of Nature Magazine we have been wanting for some time."—*Westminster Gazette*.
"We wish Dr. Renshaw every success."—*Ibis*.

VOLUME III. JUST COMMENCING.

Better write at once for Illustrated Prospectus from the Editor,
DR. GRAHAM RENSHAW, SALE, MANCHESTER.

FOR SALE.

ARCTIC BIRDS' SKINS,
MAMMALS,
SKULLS AND EGGS.

Collected on Greenland's East Coast, between 74 and 77 N. Lat.,
by Zoological expedition, 1921-22.

Full particulars on application.

G. DINESEN, Dannebrogsgade 8, Copenhagen, B. DENMARK

A Bird-lovers Paradise.

LUNDY ISLAND.

Birds in their tens of thousands migrate to nest on the Island in April, May, June and July, and there is probably no other spot within the British Isles where so many species may be observed with such perfect ease and intimacy within easy distance of a comfortable and up-to-date Hotel. During this period the Island is visited from far and near by Bird-lovers.

Accommodation may be obtained at :

The Manor House Hotel, Lundy.

FOR TARIFF APPLY :

Secretary, The Cottage, Shirwell, N. Devon.

*Telegrams: Hotel, Lundy-Island-Coast-Guard-Station.
(telegraphically counted as one word).*

For observations on "Birds of Lundy," May and June, by
Capt. Lewis R. W. Loyd, see Vol. XVI. of this Magazine,
issued November 1st, 1922.

BRITISH BIRDS

WITH WHICH WAS INCORPORATED IN JANUARY, 1917, "THE ZOOLOGIST."

EDITED BY H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., H.F.A.O.U., AND
NORMAN F. TICEHURST, O.B.E., M.A., F.R.C.S., M.B.O.U.

CONTENTS OF NUMBER 12, VOL. XVII., MAY 1, 1924.

	PAGE
A Study of the Robin by means of Marked Birds. By J. P. Burkitt	294
The Status of the Water-Pipit in England. By H. G. Alexander	304
A Swallow's Method of Feeding Young with Flies. By Dom Ethelbert Horne	306
Notes :—	
Little Bunting in Northumberland (W. G. Watson) ...	308
The Breeding Season of the Nuthatch (G. W. Thompson) ...	308
Ring-Ouzels in Kent in Winter (H. G. Alexander)	308
Hen-Harrier Nesting in Shropshire (H. E. Forrest)	309
White-fronted Goose in Shropshire (H. E. Forrest)	309
Gadwall in North Lancashire (H. W. Robinson)	309
Wild-Fowl in East Derbyshire (C. B. Chambers)	310
Red-crested Pochard and other Wild-Fowl on Essex Reservoirs (William E. Glegg)	310
Breeding of Pochard and Tufted Duck in Oxfordshire (B. W. Tucker and M. F. B. Ottley)	311
Surf-Scoters in Devonshire (W. Walmesley White)	311
Slavonian Grebe in Somerset (B. W. Tucker)	312
Stock-Doves in co. Mayo (Robert F. Ruttledge)	312
Stone-Curlew in Derbyshire (C. B. Chambers)	313
A Fourteenth Century Portrait of a Pheasant (H. S. Gladstone)	313
Pattern of Greater Wing-coverts in Common Partridge (W. P. Pycraft)	314
Breeding Habits of the Red-legged Partridge (M. Portal) ...	315
Short Notes :—	
Waxwing in Essex. Oil-clogged Common Scoter Inland in Cheshire. Green Sandpipers in Buckinghamshire in Winter	316
Letter :—	
Cuckoo's Egg in Chaffinch's Nest (C. W. Colthrup)	316

A STUDY OF THE ROBIN BY MEANS OF MARKED BIRDS.

BY

J. P. BURKITT.

HAVING for some years attempted a study of birds' song* and its relation to breeding and territory, and the Robin (*Erithacus rubecula melophilus*) (as well as the Wren) being eminently peculiar in singing more or less in every month of the year, I proposed to make a more intensive study of the Robins round my house in County Fermanagh, Ireland. The retention of Robins' song at once suggests retention of territory. The latter would be a usual argument for the former.

What I aimed at was to try to ring a number of adult Robins, each in apparent occupation of a territory, in such a way that I could know each at sight; of course, through binoculars if necessary. I began in October, 1922, and have up to date (January 7th, 1924) ringed thirty such Robins.

INTRODUCTORY.

Some interest may attach to my methods of catching and ringing. For a cage I used some old wire-gauze meat-covers. I started with a trigger arrangement for the bird to catch itself by hopping on to a rod held by the trigger. But after one catch I found it much more sure and in the end quicker to stand and wait with a long thread (30 to 100 yards) tied to a stick about seven inches long propping up the cage. I take my stand with the thread running sideways to the propped cage and with the food on the board or ground at the back centre of the cage. I can see from the distant side view when the bird appears well in under the cage and having left no food at the sides I know he must be central and catchable. It is necessary to leave some crumbs outside to attract him, but not in a position to mislead you when holding the string. I had a bit of the wire cover removable where I could insert my wrist to secure the bird without lifting the cage. I then put him in the darkness of my pocket where he kept quite quiet till I took him to a room (for safety) to ring. I was careful to liberate him again in his own territory. Of course, endless patience was needed. It might perhaps be half an hour's job or it might take weeks

* *Irish Naturalist*, Vol. XXVIII., p. 97; Vol. XXX., p. 113; Vol. XXXI., p. 117.

getting him used to the cage. But it was not uncommon to go out to catch a Robin in his estate and be back with him in an hour and a half. I have only recently realized that ordinary oatmeal is much the best bait.

When catching a sitting bird I had to decorate the cage with moss, not only for the bird's sake, but to conceal the cage from people, and then leave it for the birds to get used to it. I had also to ensure that it would fall bird-tight; and if on a bank some hinge arrangement had to be made.

As to rings, I have up to now used variations of numbers up to three on a leg or up to four between both legs. To form the later variations one of the rings had to be black, and somewhat longer and narrower than the aluminium ones in order to be the more readily detected. I gave up my first idea of coloured rings as quite too difficult of detection. I may warn others that it often takes much patience to get a clear, steady view or proper background for identifying the rings.

My aluminium rings are about 0.45 inches round by 0.18 inches high; and the dark rings 0.4 round by 0.3 high. The latter I cut out of some thin, dark, tinny material which is probably not good. Where there is a black and white ring on one foot I put the aluminium one underneath to bear more softly on the foot. The easiest combination to identify is white, black, white, on one leg.

There is no evidence up to the present that the multiple rings trouble the bird. I have nearly got to the limit of variations with four rings, and fear to burden the birds with more.

I hesitate to repeat markings that have already been used on birds which have disappeared.

I found it impossible to catch birds by food in the spring of 1923 after March 4th. They would take no notice of it. Any further catches in the breeding season had to be done at the nest. This could not safely be tried till the young were hatched for fear of desertion, and the male was a specially difficult proposition. I caught two males and two females at the nest.

The male does not feed the young nearly so freely as the female, at least under observation he is much more chary of going to the nest (*cf.* Kirkman). He may transfer his food to the female. The two keep crossing most confusingly when in the neighbourhood of the nest, and one can only realize by experience how in spite of the most careful and patient watching through glasses you may yet pull the cage

on the wrong bird. In this study I assumed that the parent which appeared to do all the nest-building and incubation was the female.

I here dare give my opinion that in spite of the Robin being considered the embodiment of simplicity among birds, it is about the most difficult of our common birds to detect in its nesting operations, till the young are hatched, except by luck. Its natural movements are thoroughly deceptive, appearing to lay emphasis on a number of spots, any but the true one. If the territory allows it to follow the usual method of concealment, it is quite a bit of luck to catch it building. The male may exhibit himself well while the female will be sneaking low along drains and undergrowth quite a distance away, rarely showing herself when at work. I am a pretty old hand at bird scouting and yet I confess that to the end of March, 1923, I thought that some of my Robins had no mates, and one I actually thought to be still unmated until I found the nest with young hatched! Even when you see two birds and suspect a nest, they perform the most confusing criss-cross movements which generally leave you carefully watching the male, while the female has slipped off leaving you as wise as ever.

It is risky to assume that a Robin is absent from a territory because it is not seen, as might especially happen out of the breeding season. Even after the leaves fall you may watch for an hour or even several hours and not see it. On the other hand, you can ordinarily calculate after mid-September on seeing the owner in half an hour. Your mere presence will probably bring the bird to you out of curiosity or pugnacity. Where the habitat is a piece of hedge or hedges the bird (out of the breeding season) normally spends its day doing regular sentry go from end to end of its estate. If you miss catching it on the up journey, your next chance will be on its down journey. You won't easily turn it back till it wishes to go. Everyone knows its normal method of perching on the quiet side of a hedge, and darting down to get something in the field and up again, and so on. But at other times it seeks the undergrowth and may disappear for ages, even when there are no leaves left to conceal it. All of a sudden it will reappear from nowhere, and you are pleased to have your patience rewarded.

A windy day is all against seeing Robins; a quiet day is the best. Shelter seems necessary for a suitable territory, such as would be provided by banks, thick hedges, etc. And thus I think that at the beginning of November or before,

when the leaves are nearly gone, certain territories which did well enough when the leaves were on, now become windswept, and their occupants must travel in search of better quarters. One such territory with me lost its occupant at that time in 1923, and in 1922 some of my losses were about that time, and I noticed just then about the country a number of cases of Robins being chivied by others. Whatever the reasons be, there are indications of movement among Robins about the end of October and beginning of November.

There appears to be another and distinct movement about the end of January and beginning of February, as some pairing seems in progress then. I hope to know more about this in February, 1924.

A certain disappearance of adult Robins in quantity is referred to below. This might by some be attributed to mortality by fighting. In my period of study I have seen very little fighting. An occasional mild clash on frontiers, or the chivying of a stranger, but no mortal combat to suggest slaughter, much less decimation. This disappearance might by others be attributed to hawks, cats, etc., but it would take a lot of evidence to get me to acquiesce in that. The Robin is commiserated with as being so "confiding," but I think he has far too wonderful eyesight and "intelligence" to be an easy prey. I am not aware at the moment what proportion of Robins are found among Hawks' kills.

HISTORIES OF INDIVIDUALS.

As the ringing was perforce done gradually, I have not data from the start about every part of the area with which I deal, and it will be seen that owing to a heavy disappearance of birds previous to the breeding season of 1923 I was badly handicapped for the nesting operations by having practically no preliminary knowledge of territories. I am now (January 7th, 1924) in a good position with all the occupants ringed to take stock of what may happen this year should I find time to do so.

No. 1 was ringed in October, 1922; it disappeared and No. 8 was ringed in that territory on December 17th. The latter was found dead later on, and a third occupant of this territory, No. 9, was ringed on January 14th, 1923.

No. 2 was also ringed in October, 1922. Nos. 3, 4, 5 and 7 disappeared before the end of 1922.

(I unfortunately lost the dates of ringing of 3, 4, 5; but 3 was last seen on December 17th, 7 was ringed on December 10th and last seen on December 24th.)

No. 6, owing to altering its site gradually up to 60 or 70 yards' total, was caught three times under the supposition that it was a fresh bird ; but it disappeared towards the end of January, 1923.

I ringed No. 10 on January 21st, 1923 ; No. 11 on February 4th ; No. 12 on February 8th ; No. 13 on March 4th.

No. 12 disappeared at once. I am not quite sure that it was a bird with a settled territory.

Thus on March 4th I had the following marked birds :— 2 M., 9 M., 10 F., 11 F., and 13. But of 13 I have no further reliable data except that it was last seen on May 26th and seemed to be the female parent of a brood. I have placed M. and F. after the numbers to indicate the sex, which I later discovered.

Nos. 2 M. and 10 F. reared a brood. They were seen feeding fledged young at the end of May and then disappeared. 10 F. was never seen again, but 2 M. was found singing in its previous territory on September 28th, and is there still. He is a strangely shy bird.

No. 9 M. got a mate, 14 F., which I caught on the nest and ringed on May 4th. They had an unusually large territory. After the brood was reared, 9 M. kept singing in one end of this territory very prominently, but I could never see the female with him. I was much surprised later to find her in the other part of the territory with another brood and a new husband, No. 17 M., which I caught at the nest and ringed on June 25th.

Nos. 14 F. and 17 M. disappeared about the end of June and have not been seen again.

No. 9 M. sang on up to the general disappearance in early June when he ceased. But he was caught sight of at intervals of a fortnight till August 13th, when he began to show himself more normally and to sing again. He is still here in the same territory.

As to No. 11 F., when I ringed it on February 4th it had been singing and keeping well to its territory, and when I let it go from my hand it sang some bars. The latter might have been in alarm. It is, I suppose, well known that many birds under great excitement sometimes insert song notes among the usual alarm ones.

I started my study with the assumption that all singing Robins were cocks, and was therefore much astonished later, on April 7th, to see this bird being fed by another, thus suggesting that No. 11 was a female, and such it turned out to be.

No. 11 F. and her mate had their first nest destroyed just when I had prepared to catch him. Their second nest was quickly made, unknown to me, at the other extreme end of their territory. Here was another chance of ringing him, but as I have said the male is a very difficult proposition. Thus at this second nest I caught the already ringed female, 11 F., twice in mistake for the cock, with the result that she deserted the poor young or at least long enough for them to die. I never succeeded in catching that male. Both of these birds disappeared early in June and she at least never reappeared.

15 F. and 16 M. were another pair. I caught the female at their first nest on May 8th. It was robbed two days after ringing her and thus the catching of the male was foiled. But within four days at most a new nest was ready and I eventually ringed him on June 9th. This pair disappeared soon after that, but I caught sight of 15 F. on July 26th with a young companion. I did not notice her again till October 14th when she seemed to be singing as well as any bird of that period, and doing sentry-go on the original territory.

On November 5th a new bird, No. 27, was noticed using and continued to use, for a while at least, a part of this territory. I ringed it on November 16th. But I did not notice it again till January 6th, 1924.

No. 16 M. I did not see again till when correcting the proof of this paper. He was occupying a territory which might be termed an extension of the old breeding territory. He may have been not far from there all the winter as in that case he would have been outside my usual ambit.

This is the sum of my 1923 nesting pairs. But in order to prepare the reader for there being room for later ringed birds, I would draw attention to the point that of my ten adult birds of the breeding season, eight disappeared early in June and the other two (with a late brood) early in July. (One of these ten was, however, caught sight of later at intervals of a fortnight.) Five or probably six of the ten never appeared again, consisting of three females and one probable female, one marked male and one unmarked male.

It should also be remembered that there were two other breeding pairs in the area wherein I have done my total ringing to date, but I had not been able to deal with them in the 1923 nesting season.

Some young birds "on their own" began to be in evidence about the second week in June, though young with gapes

still bright yellow were seen on July 20th. But only a very odd one got attached to a site and remained, and even these were seldom seen; the rest disappeared. I noticed young in sites (which they continued to occupy) on the following dates: June 17th (No. 23), July 2nd (No. 19), July 30th (No. 18), August 8th (No. 20), August 8th (No. 21). Their youth was evident by their plumage till near the middle of August.

There was a big gap between August 8th and the next appearance of any Robins, which was not till the last week in September and later. I cannot be dogmatic as to the dates of appearance of the later ones. Between September 22nd, however, and the present date (January 7th, 1924), eight more were added to my ringed list. Three of these were in territories outside the orbit of my earlier nesting pairs.

With regard to the disappearance of adults in June, several years' experience leads me to expect all song to cease here completely after the first few days of June. From my study of many other species, cessation of song points to ending of mating impulse and the approach of the moult; in fact, a period of eclipse. Cases of moulting may be seen at the end of June, but more usually in July, though any sign of an adult at this time is rare.

I was much struck by what *seemed* to be a nearly complete absence of Robins after the breeding season, except an occasional young bird, and their comparative numbers after, say, mid-September. I have referred in the introduction to this paper to the secretive habits of the Robin at times; therefore before the leaves fall, and if it does not wish to be seen and *makes no note* you will not see it. And thus one cannot easily dogmatize as to what is happening during the extraordinary scarcity of Robins from June to September.

TERRITORY.

My thirty marked birds were ringed inside an area which in 1923 gave nesting ground to seven or eight pairs and which now in winter holds thirteen to fourteen single birds.

Thus, the number of territories in this area after the breeding period of 1923 is just about double what there was in the breeding period. This seems to suggest the breaking up of each joint territory into single territories, and the female then holding a territory similarly to the male; which latter all the evidence seems to indicate. But it also requires the condition that as many adults should disappear as young birds remain; not to mention accidents or immigration.

Most of the post-June birds of 1923 have maintained a practically constant territory since they were first noticed (up to this date January 7th, 1924), but there have been two or three cases of encroachment and perhaps one of displacement. I have already described the case of No. 27.

Early in November a bird, No. 29, took as part of its territory a small, awkward and apparently unnecessary bite out of a neighbour's, No. 22, and still holds it. Again, a bird (24) noticed first about October 5th occupied as part of its territory a corner of a plantation which was previously all owned by 18. The former disappeared about October 29th. On December 9th this corner was taken by a new bird which made to itself a curious territory by apparently displacing another bird, No. 20, and thus making a territory by taking a few yards out of each of three parallel hedges which belonged to other birds. It had to fly across from one to the other. Unfortunately, when I was catching this bird the cage killed it.

With regard to the size of a territory the length of hedge is generally a more true valuation of territory than its area. My territories give an average to the breeding pairs of about 180 yards length of hedge or an area of $1\frac{1}{2}$ acres; and to single birds, out of the season, of 90 yards length and $\frac{3}{4}$ of an acre area. The dimensions are smaller, as would be expected, where there is more cover or near a hen-run with food-pickings, and larger in adverse cases. Three estates border on a hen-run here this winter, while four others come to within 30 to 40 yards of it. Yet I have never seen any of those four Robins at the hens' food, a remarkable example of the strictness of territory. Prolonged frosts might make a difference. I may remark that in the breeding season I have seen a female go far into other territory for food for the young.

SONG.

When I began this study I assumed that only the male sang. I knew of no other species where the female sang. In fact, song has been negatively defined as what the female does not do. I had not read Kirkman where he guesses that Robin females as well as males sing. Practically all the birds which I ringed in the autumn of 1922 I had known to give some song. I assumed that they were males. I have described above my disillusionment in regard to No. 11 F. I have no data as to when it ceased singing before nesting. I have no evidence yet that any female sings during the nesting season. As to female song outside the breeding

period I have up to the present had only one other known female to argue from, namely, No. 15, which I have already described as singing in October. It would be premature to say any more on this point till after a couple of months, when I expect a fair share of my present marked birds will turn out to be females. Practically all my present birds have sung.

Now as to post-breeding song I have just a few words. As I have said above, the spring song ended in the first days of June. The next song was an occasional small note or two from *young* birds once or twice in July and a little more (also from young birds) in the first week of August. This latter is the time we always notice the recommencement of Robins' song here.

The first song from one known *adult* was on August 13th and from another not till September 28th. From several years' observation I gather that the autumn song nearly disappears here by the end of October, but that promptly about New Year's Day a strong new song is certain to arise. Thus in November and December little is heard of Robins.

I am not in a position yet to suggest conclusions upon the general question of impulse for song with the Robin such as I have tried to give in regard to other common species. If this study could be prolonged no doubt points would get clearer.

Comparison between Irish Robins and English might in certain matters be difficult if the breeding periods were not similar. In England the breeding period of a number of common species lasts longer than here (as I have shown in the *Irish Naturalist*). I notice that Messrs. Alexander (*British Birds*, Vol. I., p. 369) put the spring song of the Robin in England as terminating in the fourth week of June or later, whereas ours terminates in the first week, thus implying nearly a month longer breeding period in England. The latest eggs here will probably be hatched before mid-June. The English Robin probably breeds earlier also. Our normal early clutch is laid about the middle of April.

I have only recently perused Kirkman's notes on the Robin in *The British Bird Book*, and Yarrell's. These were in many respects interestingly corroborated by my study of the bird, but not in all. Kirkman did not feel clear about boundaries till November. I did not have such doubts. I have not yet seen very glaring inequality in size of estates, nor much of boundary disputes, to both of which he refers. I have dealt above with female song and territory, in regard to which Kirkman appears to have guessed correctly. There

does not seem much in my study to suggest that the young of the year are driven away by adults, as Kirkman also doubts. He says, "it is in a sense true that they disappear, as in and about August they moult off the young feathers," but with me this process has not seemed to require a necessary disappearance though the birds certainly were not obtrusive. Yarrell says that towards the end of summer old birds mostly withdraw from observation to leafy shelters which favour the strain of moulting, and after moulting return towards autumn to their familiar haunts which have meanwhile been occupied by their progeny. That then they fight, but that contrary to vulgar belief the young are mostly defeated.

My study does not up to the present seem to corroborate this return and warfare. Besides, where did they return from and was it a special reserve for moulters? "What happens to the defeated young is," he goes on to say, "not known," and he further says that the first hard weather makes a decided effect on the distribution. My study with marked birds has hardly been large enough to give evidence on this latter point; I have guessed at some change when the leaves fall, but on the whole this 1923-4 winter has, so far, shown remarkably constant territories.

Heavy though the work be and laborious the notes in dealing with a set of marked birds, yet the number after all is so limited that one must beware of over-generalization.

Might I encourage others by remarking that I am not a man of leisure. Absolutely the reverse is the case, but the job meant ruling out other recreation.

THE STATUS OF THE WATER-PIPIT IN ENGLAND.

BY

H. G. ALEXANDER.

IT is some years now since Mr. M. J. Nicoll first pointed out that the Water-Pipit (*Anthus s. spinoletta*) was a fairly regular visitor to the coast of south-east England. I have several times seen shrill-voiced Pipits, of the general colour of the Rock-Pipit (*A. s. petrosus*) but showing some white in the sides of the tail, along the coast near Dungeness between October and March ; and in *British Birds*, Vol. XI., p. 231, I recorded a bird of this species which I suspected to be *A. s. spinoletta* heard and seen at Cambridge sewage farm on October 10th, 1915. Moreover, when I was living within reach of the Rother levels, on the borders of Kent and Sussex, in 1918 and 1919, I three times saw birds which I believed to be Water-Pipits, on March 8th, 1918, February 12th, 1919, and April 6th, 1919. But I hardly expected to continue to see these birds when I came to live in the Midlands.

However, I saw and heard a single bird of this species on November 21st, 1919, at the Upper Bittell reservoir, north Worcestershire ; and although in 1920 I did not observe any, in 1921 one bird at least was present at the same place on the following dates : September 30th, October 13th, October 27th, November 24th. But on all these occasions they behaved most tantalizingly ; either they would fly over my head, shrilly calling, and perhaps settle at the far side of the reservoir (the bird seen on November 24th, 1921, flew right over and went steadily away to the south-east), or they would suddenly rise from the mud near me and fly right off before I could see their colour, or notice whether they had any white tail-feathers.

In 1922, again, I saw none ; and last autumn (1923) I had a similar tantalizing experience at Reading sewage farm, which I visited on October 11th with Mr. J. L. Hawkins. A Pipit flew over us making the characteristic *spinoletta* note, and we saw it settle, but before we could get to the place a cart had passed, and the Pipit had disappeared.

However, at last, on October 18th, at the Upper Bittell reservoir, I had an excellent view of three birds. It was a very wet day, which perhaps caused them to behave rather differently from usual. I happened to notice a bird walking by the edge of the water, and as I was nearly hidden by some

bushes it did not seem to notice me. Two similar birds were feeding beyond it, and they sometimes came within about fifteen yards of where I was standing. While I was watching them, two Meadow-Pipits (*A. pratensis*) most conveniently settled on the mud near them, so that the differences between the two species—the almost uniform dark plumage, dark legs and larger size of the rarer species, as compared with the bright-coloured Meadow-Pipits—were very conspicuous. One of the three larger birds had its tail-feathers slightly disarranged, and in consequence showed a practically white outer tail-feather; otherwise I should not have noticed this feature as they ran about.

On January 1st, 1924, I had an excellent view of a bird that I feel confident was *A. s. spinoletta*, in company with a number of *A. pratensis*, by the flooded ground on the golf links at Littlestone-on-Sea, Kent. The white in the tail showed rather more conspicuously when it flew than in the birds I have described, but the size and general colouring were precisely the same. Two days later I put up two of these birds from the saltings by the river Rother below Rye (Sussex), and later in the day, after having seen some whose subspecies I could not determine, I saw one that was distinctly *A. s. petrosus*.

My impression is that the note of *A. s. spinoletta* is a trifle less loud and less shrill than that of *A. s. petrosus*, but the single note is always quite distinct from that of *A. pratensis*, though the "twitter" which often follows when the bird rises from the ground is not so easy to distinguish. However, if, as I cannot but believe, the Water-Pipit is in reality a fairly common autumn visitor to the reservoirs and sewage farms of England, I am surprised that other observers do not seem to have noticed it, for anyone who is familiar with the call-notes of the Rock- and Meadow-Pipits would assume on hearing it, that he had a bird of the former species under observation, even if he could not be certain of the subspecies.

I think I may definitely record *A. s. spinoletta* from Worcestershire, and add it as a suspected visitor in autumn to Cambridgeshire and Berkshire, and as a winter visitor to the inland marshes of Kent and Sussex, also confirming Mr. M. J. Nicoll's statements as to its regular occurrence on the coast of those two counties.

A SWALLOW'S METHOD OF FEEDING YOUNG WITH FLIES.

BY

DOM ETHELBERT HORNE.

THE notes from which I wrote the description of the Cuckoo egg-laying incident, communicated by Mr. B. W. Tucker to *British Birds* (*antea*, p. 214), contain a further account of a Swallow's nest which I venture to place on record as it may suggest to someone to try the same experiment.

In the summer-house of a certain monastery garden a pair of Swallows (*Hirundo r. rustica*) had built for years. In May, 1883, circumstances rendered it necessary for the nest to be removed when the young were just hatched. I therefore removed the lining of the nest and transferred it with the young birds to a box which could be suspended by a string passed through a staple driven into the pendent in the centre of the roof on which the nest was originally built. Although the young birds in the box were only six or seven inches below the original nest site, the old birds at first could not find them, but kept flying round and round the pendent and up to the place where the scraps of the nest adhered. This was between 10 and 11 a.m., but in the afternoon the birds were found visiting the box and bringing food. By means of the string the box could be raised and lowered, and we discovered that now by lowering it a foot or so the parent birds easily found it, and after two or three days they found it even if let right down on to the ground.

The birds being very tame, some eight or ten of us were able to sit round the summer-house, with the box on the floor, and watch them feed the young. Eventually a member of the community who was alone in the summer-house found that he could get the box first at his feet and then on to his knees, and after this, for several days, I had the old Swallows feeding the young with the box resting on my lap. The bird would come to the nest with two, three and sometimes four, small "blue-bottles" in its beak, arranged transversely, one in front of the other. It put one fly into the open mouth of each young one, with extraordinary rapidity, and was off again directly unless it had any excreta to carry away, which delayed it a moment or two. How the bird managed to catch and arrange the flies in its beak in the way it did was a puzzle, but a much greater one was how it got rid of the fly's wings at the last moment before putting it into the

young one's mouth. The two wings would fall from the beak of the old bird as if they had been nipped off with something, but as the beak was holding other flies and could not close, it was probably the tongue that did this wonderful trick. Time after time as we bent right over the bird, we saw the wings fall from the fly, but we never saw how they were removed. I expect if the lining of a Swallow's nest was carefully examined, it would be found to contain thousands of flies' wings, as those we saw generally fell into the nest when they were cut off. The flies used for food were always exactly the same, and as far as I could discover they never varied the whole time. The bright blue or green, rather small, "blue-bottle" was the only insect caught. The old birds used to skim about over a grass field at the back of the summer-house, and catch them there. The cock and hen fed in turns as a rule, for as fast as one bird left, the other came in. After the box had been resting on one's lap for a time, thousands of minute red lice came out of it and crawled on one's clothes! They were easily swept off and never did any harm.

When the young birds had flown I hoisted the box back to its highest position and left it alone. The Swallows then began a second nest by putting a layer of mud all along the edge of the box, making it about an inch in height. It did not go completely round the four sides, but stopped here and there. They added some new lining to the old, and when they had laid three eggs, unfortunately someone in letting the box down, let the string slip, and the box fell to the ground and all the eggs were broken. The Swallows did not seem particularly disturbed by this, but it is noteworthy that they did not build in the summer-house the following year.

I think that this experiment could be repeated by anyone who had a Swallow's nest in a position where it could be dealt with in the manner above described.



NOTES

LITTLE BUNTING IN NORTHUMBERLAND.

ON October 7th, 1920, Dr. W. Eagle Clarke identified, at close quarters, a Little Bunting (*Emberiza pusilla*) on Holy Island, Northumberland. I omitted to publish this record in my article (*antea*, Vol. XV., p. 239), being then under the impression that Dr. Clarke was about to do so.

W. G. WATSON.

THE BREEDING SEASON OF THE NUTHATCH.

IN the *Practical Handbook*, I., p. 223, the breeding-season of the Nuthatch is given as extending "from the end of April to mid-May, also sometimes late in June." On March 28th, 1923, I saw a Nuthatch (*Sitta e. affinis*) in Worcestershire, filling up a cavity in an elm with mud. By April 4th the mud part was practically finished and on May 5th the nest contained young. As I believe there were six eggs this points to the date of the laying of the first egg about April 15th—17th. The birds were at the nesting hole on March 9th in 1924.

G. W. THOMPSON.

[The dates given in the *Practical Handbook* represent approximately the time when eggs may be met with. Out of some forty records of nests with eggs or young, the earliest date for a full clutch of eggs is April 22nd, and the earliest date for young is May 8th, while the great majority of nests with eggs have been recorded during the first half of May. As Nuthatches are apparently life-paired birds it is not surprising that they should occasionally revisit their nesting-sites early in spring, especially in mild weather.—F. C. R. JOURDAIN.]

RING-OUZELS IN KENT IN WINTER.

ON January 4th, 1924, I put up two Ring-Ouzels (*Turdus torquatus*) from the broom bushes on Dungeness beach, Kent. The whitish appearance of the wings made me suspect their identity, and after following them for some little way I saw the pale ring on one bird quite distinctly. They were quite silent. One of the R.S.P.B. watchers had made a note of a Ring-Ouzel as late as November 30th, so possibly these two birds had been in the bushes since that time or earlier. I have reason to believe that Ring-Ouzels spent the winter at Dungeness four years ago. On March 29th that year I was

walking to the Hoppen Pits with one of the watchers when he told me that for a couple of months two Ring-Ouzels had been at the Pits. When we got there we soon heard the characteristic cackle, but we only saw one bird. But for what the watcher told me, I should naturally have supposed it to be a passing migrant, just arrived. H. G. ALEXANDER.

HEN-HARRIER NESTING IN SHROPSHIRE.

Two pairs of Hen-Harriers (*Circus cyaneus*) nested on certain Shropshire moorlands in 1923. For obvious reasons I refrain from giving precise localities, but of the fact there is no doubt, as the birds were watched from time to time by a friend of mine who is a good ornithologist. He saw the male birds several times and noted the white rump and unbarred wings. One of the nests unfortunately was spoilt by a pony treading on it, but a brood was reared in the other.

I may add that on September 23rd, 1923, a male Hen-Harrier descended on a farmyard near Aber, Carnarvonshire, causing all the poultry to run for shelter. It had lost its tail, probably by gun-shot, but when approached by the farmer, who wanted to capture it alive, it flew away with some difficulty, and so escaped. The white rump was conspicuous, and this, with the blue-grey colour of the body, render its specific identity certain.

The last previous record of breeding in Shropshire was in 1890, when a nest with four eggs was taken at Shawbury, and the old birds shot. H. E. FORREST.

WHITE-FRONTED GOOSE IN SHROPSHIRE.

On January 12th, 1924, Dr. W. R. H. Smith, of Shrewsbury, brought me for identification a wild goose which he had shot out of a small flock flying over Bagley Moor, Ryton-XI-Towns, the previous day. It was a young female White-fronted Goose (*Anser albifrons*), just beginning to assume adult plumage, but had no black marks on the breast. I heard of wild geese being seen in different parts of Shropshire during November-December, 1923, but this was the only one obtained to identify the species. H. E. FORREST.

GADWALL IN NORTH LANCASHIRE.

I AM informed by one of the shooting tenants that a female Gadwall (*Anas strepera*) was shot on Leighton Moss, near Carnforth, north Lancashire, during the past winter, 1923-24. The bird was identified by Dr. Stanley Wood. Mitchell in his *Birds of Lancashire* mentions only five records or seven specimens of this duck in Lancashire, the last over thirty-nine years ago. H. W. ROBINSON.

WILD-FOWL IN EAST DERBYSHIRE.

DURING the cold weather of February, 1924, there was considerable movement amongst wild-fowl in this district, and on the ponds in Hardwick Park I observed on the 18th a pair of Shelducks (*Tadorna tadorna*) sitting on the ice. This is by no means a common bird in the county and only six definite previous occurrences are on record. On the 24th a male Scaup (*Nyroca marila*) was swimming with the Tufted Ducks and Pochards, and on the 25th a Goosander (*Mergus merganser*) arrived during the afternoon.

On the morning of March 4th several flocks of tired Peewits passed over flying in a south-westerly direction, but on the 13th inst. our local breeding birds had returned to their haunts.

C. B. CHAMBERS.

RED-CRESTED POCHARD AND OTHER WILD-FOWL
ON ESSEX RESERVOIRS.

At Walthamstow Reservoirs, Essex, on February 16th, 1924, I had the good fortune to identify a handsome male Red-crested Pochard (*Nettion rufina*). This bird was observed on the Racecourse Reservoir, which, for some unknown reason, is more frequented by the numerous wild-fowl than any other of the series, where it was in company with a number of Common Pochards (*Nyroca ferina*). In the first instance the Red-crested Pochard was seen by means of a 12 × monocular and afterwards was watched carefully through a telescope of 50 ×. Fortunately the light was good and the Pochard, acting in a leisurely manner, at times swimming about quietly, at others reposing, and on one occasion coming on to the edge of an island, gave every opportunity for examination.

According to Miller Christy's *Birds of Essex*, the Red-crested Pochard has been recorded only once in Essex, as far back as 1844, and this is confirmed by *A Practical Handbook of British Birds*. Thus the Walthamstow record constitutes the second occurrence in the county. It may be added that the bird appeared to be in good plumage.

On the same date, on the Racecourse Reservoir, one male Goldeneye (*Bucephala c. clangula*), a species which is scarce in this locality, and a Smew (*Mergus albellus*), probably a female, were seen. A Red-throated Diver (*Colymbus stellatus*) was seen on No. 4, and a Green Sandpiper (*Tringa ochropus*) was flushed from the side of No. 5 Reservoir. It was noticeable that there was a marked increase in the numbers of Great Crested Grebes (*Podiceps c. cristatus*). Most of the birds which compose the large and increasing colony of this species

here disappear on the approach of winter, but a few remain. On March 15th I noticed a male Scaup-Duck (*N. m. marila*) on the Lockwood reservoir.

The birds frequenting these reservoirs have been more interesting this winter and it would seem that the cessation of the fortnightly shoots which were permitted in previous winters is bearing fruit.

WILLIAM E. GLEGG.

BREEDING OF POCHARD AND TUFTED DUCK IN OXFORDSHIRE.

At the present time there appears to be no record of the breeding of either Pochard (*Nyroca f. ferina*) or Tufted Duck (*N. fuligula*) in Oxfordshire. It is therefore worth recording that several pairs of both species nested in 1923 on the lake in Blenheim Park, Woodstock. Considerable numbers of these ducks, as well as Mallard, Teal, Wigeon, etc., frequent this lake from autumn to spring. The place offers ideal breeding sites for both Pochard and Tufted Duck, and we therefore paid a visit in mid-June, 1923, with a view to ascertaining whether, as appeared highly probable, any pairs remained to nest.

On June 13th we saw two female Tufted Ducks with broods of four and six respectively, and not less than six broods of Pochard. One of the broods of Tufted Duck and one of Pochard were on the main lake. All the rest were on the narrow lower end, called Bladon Lake, which is merely the original sluggish River Glyme a little widened and overgrown with beds of bur-reed (*Sparganium*) and other aquatic plants. Round the island in the main lake we counted about 23-25 Tufted Ducks, of which all but two or three were drakes. It may therefore be safely assumed—even supposing that some of these were unpaired birds—that other females were still sitting on the island or elsewhere. From the above numbers it may be considered certain that this breeding-station has been occupied for some years, but it does not appear previously to have come under the notice of any ornithologists.

B. W. TUCKER.

M. F. B. OTTLEY.

SURF-SCOTERS IN DEVONSHIRE.

On March 6th, 1924, a pair of Surf-Scoters (*Oidemia perspicillata*) were seen near Dawlish on the south Devon coast by a party of four, three of whom, Mr. E. S. Allen, Col. J. T. W. Fiennes, and myself, were equipped with powerful telescopes as well as binoculars. We watched these birds carefully at a distance of 200-250 yards for nearly an hour. One of the

pair was evidently a young drake as it showed brownish-white on lower breast and belly, and had little, if any, white between beak and crown, though otherwise its appearance was that of an old male, the white nape, yellow-orange bill, and very black plumage being clearly defined.

The other bird was an adult duck, brown all over except for a certain, though small, amount of white on the nape, and an irregular whitish patch on side of head.

These Surf-Scoters were near, though not consorting with, a large party of Mallard and Wigeon, and our attention was first drawn to them by noticing the curious line of the head and bill, so like that of the Common Eider, and so different from that of the Common and Velvet-Scoter.

This seems to be the fourth record of the Surf-Scoter off Devon coasts.

W. WALMESLEY WHITE.

SLAVONIAN GREBE IN SOMERSET.

ON March 30th and again on April 2nd, 1924, I had a Slavonian Grebe (*Podiceps auritus*) under observation on one of the reservoirs at Barrow Gurney, North Somerset, where I saw a presumed *P. auritus* in October last (*v. antea*, p. 211). The present bird was still in practically full winter plumage.

Although these reservoirs seem hitherto to have received little, or at best only spasmodic, attention from Somerset ornithologists, two out of the eight or nine previous records of the Slavonian Grebe in the county are from Barrow. This, in conjunction with the above two observations, renders it probable that the species is not really a very uncommon visitor there.

B. W. TUCKER.

STOCK-DOVES IN CO. MAYO.

THE range of the Stock-Dove (*Columba oenas*) in Ireland seems to be increasing steadily. Ussher & Warren in 1900 in their *Birds of Ireland* gave its range as roughly to the east of a line from co. Antrim to co. Clare. In 1920 the bird had spread west of that line and appeared in co. Galway.

It is interesting to note that the Stock-Dove has extended its range now to co. Mayo. My brother was the first to notice their presence, and it was not until this year that I had an opportunity of observing them myself. The first appeared in 1919 when my brother, while fishing in Hollymount Demesne, saw birds which he is now sure were Stock-Doves. In 1920 he saw a bird which he is now almost certain was a Stock-Dove, in Bloomfield; this was on April 20th. In 1921 he noted three on August 29th in Hollymount Demesne, and again on December 31st he saw a flock of eight to ten in

trees at Cloonee, on the shores of Lough Carra. In 1923 two pairs were seen in spring round Bloomfield House and looked like nesting, but my brother left home before he was able to ascertain if they bred.

In 1924 I myself saw a Stock-Dove in Bloomfield on March 1st, and on my return from England on March 15th I was told that they had been heard near the house. Accordingly the following morning I was on the look out and before long saw two together in an old beech tree.

It seems, however, that at present Stock-Doves are not very plentiful in the county, though in all probability they will increase.

ROBERT F. RUTTLEDGE.

STONE-CURLEW IN DERBYSHIRE.

I HAVE a Stone-Curlew (*Burhinus æ. ædicnemus*) in my possession which was shot at Shardlow, near Derby, on October 22nd, 1922. There is only one definite record of this species from the county: a bird shot near Overton Hall in 1890.

C. B. CHAMBERS.

A FOURTEENTH CENTURY PORTRAIT OF A PHEASANT.

IN connection with the sixteenth century portrait of a Pheasant which has already been published in this magazine,* it is of interest to reproduce here the picture of a Pheasant



A FOURTEENTH CENTURY PORTRAIT OF A PHEASANT.

which forms part of the marginal adornment of the Louterell Psalter.†

* *British Birds Magazine*, Vol. XV., p. 67 (see also Vol. XVII., p. 36).

† Louterell Psalter (Vol. 84 rev.) in MS. Dept., British Museum.

This Psalter is of a date not later than 1340 and is well known as providing pictures of the costumes, pastimes and occupations of the period. It is of English origin and is profusely decorated in the East Anglian style.*

For permission to reproduce the picture of the Pheasant I have to thank the British Museum authorities, and it may be added that it is of the same size as the original which is in colour: the head and legs being dirty-white, the protuberances at the base of the bill red, the eye black, the eyelids margined in red, the head and neck green, the back black with white lines margined with grey, the breast, body, thighs and tail rufous-red heightened with black.

The existence of this picture in the Louterell Psalter was made known to Mr. H. F. Witherby by Mr. Miller Christy and it seems only fair that this fact should be noted here.

H. S. GLADSTONE.

PATTERN OF GREATER WING-COVERTS IN COMMON PARTRIDGE.

RECENTLY examining wings of males of the Common Partridge (*Perdix p. perdix*) I came across a pair in which the greater (major) coverts, instead of being cross-barred with buff, as they are, apparently, generally supposed always to be in the male, were, on the contrary, finely vermiculated, like the median coverts, but lacking the chestnut spot on the inner web. The shaft-streak was precisely similar to that in the median coverts.

Now that attention has been drawn to this fact a large number of wings of males will probably be examined by readers of *British Birds*, and I suspect that it will be found this is a character due to age, perhaps advanced age. For the moment the material at hand for the investigation of this point is necessarily limited; but it is to be hoped that all who can will give the subject careful attention as soon as the opportunity presents itself. It *may*, of course, prove to be that this is merely a case of individual variation, and not a stable, constantly recurring, character representing the final word in the assumption of the adult dress. W. P. PYCRAFT.

[Mr. Pycraft has very kindly allowed me to examine the wings above described and I should say they were those of a somewhat abnormally coloured bird. The outer primaries

* *Facsimiles of Ancient Manuscripts*, etc., pub. by The New Palaeographical Society; ed. by Edward Maunde Thompson and others. Vol. I., 1903-1912, letterpress to plates 41-43 and Society of Antiquaries of London; *Vetusta Monumenta*, Vol. VI., 1885, letterpress to plates xx-xxv.

showed that the bird was more than a year old, but beyond that it is not possible, so far as I know, to ascertain the age by the plumage.—H.F.W.]

BREEDING HABITS OF THE RED-LEGGED PARTRIDGE.

As is well known in the Common Partridge (*Perdix p. perdix*) the hen only incubates and the cock takes his share in looking after the young. In the case of the Red-legged Partridge (*Alectoris r. rufa*), however, there seems considerable evidence to show that the hen lays two clutches of eggs, one of which is incubated by her and the other by the cock, while each looks after its own brood when hatched.

The evidence I have for this at present is as follows: In 1921 we had one pair of Red-legged Partridges opposite my house in Hampshire. I found a nest with ten eggs and no more eggs were laid in it for eighteen days. The hen then returned and laid three more eggs and began to sit. A week before her brood hatched a single Red-legged Partridge appeared with ten chicks. Both lots were often seen feeding, each with one old bird but never together.

My friend, Mr. C. Alington of St. Neots, first mentioned to me some years ago that he noted this procedure and writes me that he has seen many broods of Red-legged Partridges but never with more than one old bird in attendance. He states that it is well known to Partridge keepers that the early nests and eggs are apparently deserted for from ten to twenty days, but that if they are not touched the bird returns and hatches them. He and his keeper, Smith, used twenty years ago to watch all the Partridges' nests most carefully, and Smith pointed out that there was nearly always a second nest of a Red-legged Partridge within 300 to 500 yards of the first (apparently deserted) nest, and that when the full complement of eggs had been laid in the second nest the first one had a bird on it, and incubation began in both nests almost simultaneously.

The head-keeper at Laverstoke Park, a very observant man, writes as follows: "I should say the Red-leg hen lays two nests and the cock sits on one. I have never seen two old birds together when nesting, and I have never seen the cock bird come up to the hen when the eggs are hatching as the Common Partridge does."

I hope that some of the readers of *British Birds* will be able to give some definite facts regarding this habit or will be in a position this year to make such observations as will afford

definite proof concerning it. Meanwhile, I may relate some observations made on a pair of Chukors (*Alectoris græca cypriotes*) which, although of a different species, support the view that this is a habit of *Alectoris rufa*. In 1920 Colonel R. Meinertzhagen brought me a pair of tame Chukors from Crete. These were pinioned and finally put into half an acre of rough grass and bushes which was wired in. No one was allowed inside because the birds desert so easily. About June 12th the male appeared with twelve chicks and on July 6th the female was seen with seven or eight. The male was lame and could thus be identified. From this time onwards the two broods were never seen together, and later two nests, one containing twelve egg-shells and three eggs and the other nine egg-shells, were found at opposite ends of the enclosure. M. PORTAL.

WAXWING IN ESSEX.—Mr. W. E. Glegg has drawn our attention to a record in the *Times* of February 20th, 1924, of a Waxwing (*Bombycilla garrulus*) having been seen on January 19th, 20th and 21st at Church House, Walthamstow, by the Rev. J. H. Keen. Mr. Glegg adds that he has seen Mr. Keen and is quite satisfied with the correctness of the record.

OIL-CLOGGED COMMON SCOTER INLAND IN CHESHIRE.—Mr. A. W. Boyd writes that a badly "oiled" drake Common Scoter (*Oidemia n. nigra*) was shot on Marbury Mere, near Northwich, Cheshire, on January 30th, 1924. The bird was emaciated and empty, the oil-clogged plumage having doubtless prevented the bird from obtaining its food properly.

GREEN SANDPIPERS IN BUCKINGHAMSHIRE IN WINTER.—Dr. G. C. Low informs us that on December 29th, 1923, he saw two Green Sandpipers (*Tringa ochropus*) on a farm south-west of Colnbrook and shot one of them, an adult male, for identification. Some time after he saw another near the same place.

LETTER.

CUCKOO'S EGG IN CHAFFINCH'S NEST.

To the Editors of BRITISH BIRDS.

SIRS,—With reference to the notes on this subject (*antea*, pp. 166 and 214) it may be useful to record that on May 15th, 1910, I found a Chaffinch's nest with three eggs and a Cuckoo's egg, near Petworth, Sussex, and on May 15th, 1922, a Chaffinch's nest with four eggs and a Cuckoo's egg, near Croydon, Surrey. C. W. COLTHRUP.

INDEX.

NOTE.—The nomenclature followed in this volume is in accordance with the text of *A Practical Handbook of British Birds* but, in order to avoid so far as possible the use of more than one scientific name for the same bird, only those corrections have been adopted which were published on pages 2 to 4 of this volume. In the next volume the amended list appearing on pages 901–936 of Vol. II. of the *Handbook* and reprinted in *A Check-List of British Birds* will be used as a standard.

- aalge*, *Uria a.*, see Guillemot, Northern.
- ACLAND, MISS C. M., Notes on curious mass of bones in a Barn-Owl's hole, 60; Bewick's Swan in Glamorganshire, 63; Nest-building habits of the Long-tailed Tit, 244; Letter on Wrynecks in Surrey, 251.
- acuta*, *Anas a.*, see Pintail.
- Additions and Corrections to the Practical Handbook of British Birds, 2.
- æruinosus*, *Circus æ.*, see Harrier, Marsh.
- æsalon*, *Falco c.*, see Merlin.
- affinis*, *Larus f.*, see Gull, British Lesser Black-backed.
- , *Sitta e.*, see Nuthatch, British.
- alba*, *Tyto a.*, see Owl, Barn-.
- albellus*, *Mergus*, see Smew.
- albifrons*, *Anser*, see Goose, White-fronted.
- , *Sterna a.*, see Tern, Little.
- albionis*, *Uria aalge*, see Guillemot Southern.
- ALEXANDER, H. G., on Birds at Dungeness, September 1922, 26; The Status of the Water-Pipit in England, 304; Notes on Woodpeckers and pinecones, 245, 276; Late immigration of Sky-Larks into Kent, 274; Birds on North Worcestershire Reservoirs, 1922 and 1923, 282; Ring-Ouzels in Kent in winter, 308.
- alexandrinus*, *Charadrius*, see Plover, Kentish.
- ALFORD, C. E., Note on probable Golden Oriole in Suffolk, 21.
- alle*, *Alle*, see Auk, Little.
- alpina*, *Calidris*, see Dunlin.
- anglicus*, *Dryobates m.*, see Woodpecker, Great Spotted.
- anglorum*, *Regulus r.*, see Goldcrest.
- anser*, *Anser*, see Goose, Grey Lag-.
- apivorus*, *Pernis a.*, see Buzzard, Honey-.
- apus*, *Apus a.*, see Swift.
- arborea*, *Lullula a.*, see Lark, Wood-.
- arctica*, *Fratercula*, see Puffin.
- argentatus*, *Larus*, see Gull, Herring-.
- aristotelis*, *Phalacrocorax a.*, see Shag.
- ARMSTRONG, EDWARD A., First impressions of some birds seen on the Naardermeer, 102; Note on the feeding-habits of the Ruff, 113.
- arquata*, *Numenius a.*, see Curlew.
- arvensis*, *Alanda a.*, see Lark, Sky-.
- ASHFORD, W. J., Notes on early nesting of Grey Wagtail in the south of England, 85; Unusual nest of Oystercatcher, 87; Early laying and incubation period of Stone-Curlew, 113.
- atra*, *Fulica*, see Coot.
- atrocularis*, *Ænanthe d.*, see Wheat-ear, Eastern Desert-.
- Auk, Little, in Isle of Man, 20; in Norfolk, 273.
- auritus*, *Podiceps*, see Grebe, Slavonian.
- Avocets in north Kent, 169.
- avosetta*, *Recurvirostra*, see Avocet.
- BARROW, W. HUBERT, Note on Wood-Sandpiper in Leicestershire, 88.
- bassana*, *Sula*, see Gannet.

- BATES, F. A., Note on probable Ferruginous Duck in Flintshire, 167.
- BAXTER, MISS EVELYN V. and RINTOUL, MISS L. J., Note on large clutch of Curlew's eggs, 170; see also Rintoul, Miss L. J.
- BEDFORD, DUCHESS OF, Note on early nesting of Grey Wagtail, 39.
- BENTHAM, H., Notes on Great Grey Shrike in Surrey, 165; Late nesting of Grey Wagtail, 165; Firecrest in Surrey, 165.
- bewickii*, *Cygnus*, see Swan, Bewick's.
- Bittern, in Isle of Man, 19; in Norfolk, 257, 269; in Sussex and Anglesey, 289.
- , Little, in Norfolk, 269.
- Blackbird, in the Isles of Scilly, 55; Recovery of marked, 79, 237; Converting and using nest of Song-Thrush, 85; Two unusual nests, 186.
- BLATHWAYT, REV. F. L., Notes on Great Black-backed Gull breeding in Somerset, 66; Sandwich Tern breeding in Dorset, 89; Sandwich Tern in Somerset, 147; Letter on a habit of the Lesser Redpoll, 148.
- Bluethroat, at Dungeness, 27; in Norfolk, 268.
- BLYTH, R. O., Note on Hawfinch in Renfrewshire, 274.
- BOND, J. A. WALPOLE, Notes on Nestling Marsh-Warbler, 185; Nestling Rock-Dove, 247.
- borealis*, *Phylloscopus b.*, see Warbler, Eversmann's.
- borin*, *Sylvia*, see Warbler, Garden.
- BORRER, C., Notes on Sandwich Terns in Norfolk and the normal clutch of eggs, 189; the normal clutch of Sandwich Tern's eggs, 249; Letter on Raven removing nesting-material to another site, 171.
- BOYD, A. W., Notes on Blackbird converting and using nest of Song-Thrush, 85; Garganey in Cheshire in spring, 86; Common Scoters inland in Cheshire in summer, 87; Red-necked Phalarope in Cheshire, 88; Shag found inland in Cheshire, 143; Notes from Staffordshire, 139.
- brachyrhynchus*, *Anser*, see Goose, Pink-footed.
- Brambling, in Middlesex in July, 83; in Norfolk, 265.
- britannicus*, *Cinclus c.*, see Dipper, British.
- , *Parus a.*, see Tit, British Coal.
- British Birds in the Fourteenth Century, 29.
- "British Birds" Marking Scheme, progress for 1923, 231.
- BROWN, R. H., Some breeding habits of the Swallow and House-Martin, 183; the nest-building and other breeding-habits of the Long-tailed Tit, 206; Field-notes from Cumberland, 222; Notes on early nesting of the Yellow Bunting, 83; Tawny Owl feeding young in August, 112; Unusual nesting-site of Redshank in Cumberland, 144; Nesting Kingfishers, 155; Blackbird feeding on grain, 245; Unusual flight of a Kestrel, 247; Letter on the breeding of Racing Pigeons, 172.
- Bullfinch, British, New name for, 2; Recovery of marked, 236.
- , Northern, at Fair Isle, 195.
- Bunting, Cirl, Small broods, 109.
- , Corn-, in the Isles of Scilly, 56.
- , Eastern Large-billed Reed-, new name for, 2.
- , Lapland, in Scotland, 195; in Norfolk, 255, 265.
- , Little, in Northumberland, 308.
- , Snow-, in Warwickshire, 185.
- , Western Large-billed Reed-, new name for, 2.
- , Yellow, Early breeding of, in Suffolk, 38; Early nesting of, 83; Late nesting of, in Cumberland, 224.
- BUNYARD, P. F., Surrey Field-notes, 198; Note on remarkable nesting-site of Sand-Martin, 187; Letters on nest materials of Pied Flycatcher, 192; Large clutches of eggs, 193.

- BURKITT, J. P., a study of the Robin by means of marked birds, 294.
- buteo*, *Buteo b.*, see Buzzard, Common.
- BUTTERFIELD, E. P., Letter on Cuckoo laying twice in the same nest, 148.
- Buzzard, Common, Occupying nest of Raven, 59; in Sussex, 90; on Lundy, 159.
- , Honey-, in Isle of Man, 19; in Norfolk, 269.
- , Rough-legged, in Norfolk, 268.
- cabaret*, *Carduelis l.*, see Redpoll, Lesser.
- calandra*, *Emberiza*, see Bunting, Corn-.
- canadensis*, *Branta*, see Goose, Canada.
- cannabina*, *Carduelis c.*, see Linnet.
- canorus*, *Cuculus c.*, see Cuckoo.
- canus*, *Larus c.*, see Gull, Common.
- canutus*, *Calidris*, see Knot.
- carbo*, *Phalacrocorax*, see Cormorant.
- CARTER, MISS B. A., Notes on Snow-Bunting in Warwickshire, 185; Sheld-Ducks, Shag and Manx Shearwater in Warwickshire, 188.
- CATON-HAIGH, G. H., Note on Yellow-browed Warblers in Lincolnshire, 186.
- Chaffinch, Recovery of marked, 78, 236.
- CHAMBERS, C. B., Notes on large clutch of Curlew's eggs, 170; Wild-fowl in East Derbyshire, 310; Stone-Curlew in Derbyshire, 313.
- CHANCE, EDGAR, Some observations on Cuckoos in 1923, 98.
- Changes in the *Hand-List of British Birds* not yet published in the *Practical Handbook*, 4.
- CHARTERIS, THE HON. G., Note on Woodchat Shrike in Pembrokeshire, 22.
- CHISLETT, R., The Whimbrel in Shetland, 150.
- chloris*, *Chloris*, see Greenfinch.
- chloropus*, *Gallinula ch.*, see Moorhen.
- cinerea*, *Ardea*, see Heron.
- , *Motacilla c.*, see Wagtail, Grey.
- cirlus*, *Emberiza*, see Bunting, Cirl.
- citrinella*, *Carduelis c.*, see Finch, Citril.
- , *Emberiza c.*, see Bunting, Yellow.
- clangula*, *Nyroca c.*, see Goldeneye.
- CLARKE, W. J., Note on Migrant Wrynecks in Yorkshire, 40.
- clarkei*, *Turdus ph.*, see Thrush, British Song-.
- clypeata*, *Spatula*, see Shoveler.
- cælebs*, *Fringilla c.*, see Chaffinch.
- colchicus*, *Phasianus*, see Pheasant.
- COLES, R. E., Note on Woodpeckers and pine-cones, 246.
- COLTHRUP, C. W., Letter on Cuckoo's egg in Chaffinch's nest, 316.
- communis*, *Sylvia c.*, see White-throat.
- compiler*, *Emberiza l.*, see Bunting, Western Large-billed Reed-.
- CONGREVE, MAJOR W. M., Notes on Little Owl in Pembrokeshire, 22; Clutches of five eggs of Peregrine Falcon, 62; Decorated Moor-Hen's nest, 68; Letters on Birds removing nesting material to another site, 192; Nest materials of Pied Flycatcher, 251; Cannibalistic propensity of a Redbreast, 251.
- Coot and Little Grebe laying in same nest, 112.
- corax*, *Corvus c.*, see Raven.
- CORBET, A. S., Notes on the breeding of the Marsh Warbler in Berkshire, 185.
- Cormorant, Velocity of flight of, 24; Recovery of marked, 80, 240.
- cornix*, *Corvus c.*, see Crow, Hooded.
- corone*, *Corvus c.*, see Crow, Carrion-.
- coturnix* *Coturnix c.*, see Quail.
- Courser, Cream-coloured, new name for, 4.
- COWARD, T. A., Note on Little Gull and Little Stint in Norfolk, 66.
- Crane, Common, Fossil Remains found in Yorkshire, 191.
- crecca*, *Anas c.*, see Teal.
- crex*, *Crex*, see Landrail.
- cristatus*, *Podiceps c.*, see Grebe, Great Crested.

- CROOK, W. M., Note on Scaup-Duck and Gadwall in London, 167.
 Crossbill in Norfolk, 265.
 Crow, Carrion-, Recovery of marked, 77; Numbers in Surrey, 198; Breeding habits of, in Cumberland, 222.
 —, Hooded, on Lundy, 158; Feeding habits of, 243.
 Cuckoo, in Isle of Man, 18; Returning to same summer quarters for five years, 23; Observations on, in 1923, 98; Laying twice in the same nest, 148, 171; Habits of, in Surrey, 202; Egg in Chaffinch nest, 166, 214, 316; in Willow-Warbler's nest, 244; Eggs in domed nests, 252, 291, 292; Oviposition of, 214, 215; Two young, fed by the same Pied Wagtail, 252.
 Curlew, Nesting in Shetland, 116; Large clutch of eggs, 146, 170, 193; Breeding in Surrey, 205.
 —, Stone-, Probable second brood, 65; Early laying and incubation period of, 113; Large clutch of eggs of, 193; Breeding in Surrey, 205; in Derbyshire, 313.
curonicus, *Charadrius d.*, see Plover, Little Ringed.
curruca, *Sylvia c.*, see Whitethroat, Lesser.
cursor, *Cursorius c.*, see Courser, Cream-coloured.
 CURTLER, M. S., Note on Redshank breeding in Surrey, 283.
cyaneus, *Circus c.*, see Harrier, Hen-
cygnus, *Cygnus*, see Swan, Whooper.
dartfordiensis, *Sylvia u.*, see Warbler, Dartford.
 DAVISON, R. C., Notes on Great Crested Grebe in London, 210; Shag in Oxfordshire, 210.
delicata, *Capella g.*, see Snipe, American.
 Dipper, British, New name for, 3; in Isle of Man, 18; Nesting away from water, 59; Nesting in Wiltshire, 86, 115; Breeding habits of, in Cumberland, 225.
 Diver, Black-throated, in Norfolk, 270; on Essex Reservoirs, 310.
 Diver, Great Northern, in Isle of Man, 19; Duration of dive, 64; in Norfolk, 270.
 —, Red-throated, Nesting on Islay, 196.
domesticus, *Passer*, see Sparrow, House-
 DOOLEY, T. L. S., Notes on Cuckoo returning to same summer quarters for five years, 23; Great Spotted Woodpecker in north Lancashire, 208; Hen-Harrier in Lancashire, 209.
 Dotterel, Large clutch of eggs of, 193.
dougallii, *Sterna d.*, see Tern, Roseate.
 Dove, Rock-, Nesting of, 247.
 —, Stock-, in the Isles of Scilly, 57; in co. Mayo, 312.
 —, Turtle-, in Banffshire, 191.
 Duck, Ferruginous (probable), in Flintshire, 167, 188.
 —, Scaup-, in Staffordshire, 141; Inland in Yorkshire, 213; in East Derbyshire, 310; on Essex Reservoirs, 311.
 —, Sheld-, in the Isles of Scilly, 56; in Warwickshire, 188; Habits of young, in Cumberland, 226; in East Derbyshire, 310.
 —, Tufted, in Staffordshire, 141; Breeding in Oxfordshire, 311.
 Dungeness, Birds at, 26.
 Dunlin in Staffordshire, 142.
eburnea, *Pagophila*, see Gull, Ivory-
epops, *Upupa e.*, see Hoopoe.
ericetorum, *Turdus*, see Thrush, British Song-
erythropus, *Tringa*, see Redshank, Spotted.
europæus, *Caprimulgus*, see Nightjar.
excubitor, *Lanius*, see Shrike, Great Grey.
fabalis, *Anser f.*, see Goose, Bean-
falcinellus, *Plegadis f.*, see Ibis, Glossy.
 Falcon, Peregrine, Occupying nest of Raven, 59; Large clutch of eggs, 62, 188, 209; in Staffordshire, 139; on Lundy, 159; in Norfolk, 268.
ferina, *Nyroca f.*, see Pochard.

ferruginea, *Calidris*, see Sandpiper, Curlew-.

Finch, Citril, Song of, 38.

Firecrest, at Dungeness, 27; in Surrey, 165.

flammeus, *Asio f.*, see Owl, Short-eared 204.

flava, *Eremophila a.*, see Lark, Shore-.

——, *Motacilla f.*, see Wagtail, Blue-headed.

Flycatcher, Pied, Nest-materials of, 171, 192, 251; in Norfolk, 266.

——, Red-breasted, in Scotland, 195.

——, Spotted, Large clutch of eggs, 59.

FORREST, H. E., Notes on Golden Oriole in Shropshire, 38; Spotted Redshank in Shropshire, 169; Winter breeding of Wren, 275; Smews and other Wild-Fowl on the Conway Estuary, 281; Manx Shearwater in Shropshire, 289; Hen-Harrier in Shropshire, 309; White-fronted Goose in Shropshire, 309.

FRASER, A. C., Letter on Barnacle-Geese in Dorset, 24.

frugilegus, *Cornus f.*, see Rook.

fulicarius, *Phalaropus*, see Phalarope, Grey.

fuligula, *Nyroca*, see Duck, Tufted.

fuscus, *Larus f.*, see Gull, Scandinavian Lesser Black-backed.

Gadwall in Isle of Man, 19; in Staffordshire, 140; in London, 167; in North Lancashire.

GAIT, R. P., Letter on birds removing nesting-material to another site, 290.

GAIT, R. P. and COLDSTREAM TUCKETT, Note on the nest-building habits of the Long-tailed Tit, 243.

Gannet, on Lundy, 159; Nesting on the Isle of May, 196; Recovery of marked, 240; Inland in Essex, 289.

Garganey in Lancashire, 42; in Cheshire in spring, 86; in Staffordshire, 140; Nesting in Norfolk, 270; Breeding in Essex, 280.

GARNETT, MISS MARJORY, Letter on the colour of the iris in the Jay, 115.

GARNETT, R. M., Note on Green and Wood-Sandpipers, Spotted Redshank and Greenshank in Cheshire, 144.

garrulus, *Bombycilla*, see Waxwing.

——, *Coracias g.*, see Roller.

gentilis, *Accipiter*, see Goshawk.

gibraltariensis, *Phœnicurus o.*, see Redstart, Black.

GILBERT, H. A., Note on bones of Starling found in a Roman urn in Herefordshire, 274.

glacialis, *Fulmarus g.*, see Petrel, Fulmar.

GLADSTONE, H. S., the Introduction of the Ring-necked Pheasant to Great Britain, 36; Seventeenth Century names for some British Birds, 50; Note on a Fourteenth Century Portrait of a Pheasant, 313.

glareola, *Tringa*, see Sandpiper, Wood-.

glaucoides, *Larus*, see Gull, Iceland.

GLEGG, WILLIAM E., Notes on the nesting of the Whimbrel, 70; Birds at Staines Reservoir, Middlesex, 143; Avocets in North Kent, 169; Wild-Fowl at Staines Reservoir, 209; Letter on Folklore of the Lady Hen or Skylark in Shetland, 115; Red-crested Pochard and other Wild-fowl on Essex Reservoirs, 310.

Godwit, Black-tailed, at Dungeness, 28; in Norfolk, 272.

Goldcrest, Unusual position for nest, 39.

Goldeneye in Staffordshire, 141; on Essex Reservoirs, 310.

Goosander, in Staffordshire, 141; in Middlesex, 209; in Norfolk, 270; in East Derbyshire, 310.

Goose, Barnacle-, in Dorset, 24.

——, Bean-, in Norfolk, 258.

——, Canada X Grey Lag-Goose in Norfolk, 269.

——, Grey Lag-, Date of departure from N. Lancashire, 90.

——, Pink-footed, in Norfolk, 258; Albino, in Norfolk, 270.

- Goose, Snow-, in Norfolk, 258.
 —, White-fronted, in Shropshire, 309.
- GORDON, A., Note on late stay of Swift in Scotland, 166.
- GORDON, SETON, Notes on unusual nest of Oystercatcher, 41; Great Shearwater in Argyllshire, 87; the Hebridean Red Grouse, 147.
- Goshawk, Seen off co. Kerry, 43.
- GOSNELL, H. T., Note on Common Bitterns in Sussex and Anglesey, 289.
- grabæ*, *Fratereula arctica*, see Puffin, British.
- gravis*, *Puffinus*, see Great Shearwater.
- Grebe, Black-necked, in Sussex, 22; in Staffordshire, 142; in Norfolk, 259.
- , Great Crested, in Isle of Man, 19; in London, 210; Increase on Essex Reservoirs, 310.
- , Little, and Coot laying in same nest, 112.
- , Red-necked, in Norfolk, 259.
- , Slavonian, at Somerset Reservoirs, 211; in Somerset, 312.
- Greenfinch in the Isles of Scilly, 56; Habits of, in Cumberland, 223; Recovery of marked, 236.
- Greenshank in Staffordshire, 142; in Cheshire, 145, 146; Large clutch of eggs of, 193; at Somerset Reservoirs, 211.
- GRIFFITH, A. F., Note on oil-clogged Common Scoters inland in Sussex and Hampshire, 281.
- griseigena*, *Podiceps*, see Grebe, Red-necked.
- Grouse, Hebridean Red, Peculiarities of, 147.
- , Irish Red, Name of, 107.
- grus*, *Megalornis*, see Crane, Common.
- grylle*, *Uria g.*, see Guillemot, Black.
- Guillemot, Common, in Isle of Man, 20; Recovery of marked, 242.
- , Black, in Isle of Man, 20; Nesting in Ayrshire, 196.
- , Northern, New name for, 4.
- , Southern, New name for, 4; on Lundy, 159.
- gularis*, *Cinclus c.*, see Dipper, British.
- Gull, Black-headed, Recovery of marked, 81; Marked abroad and recovered in England, 242.
- , British Lesser Black-backed, in Isle of Man, 20; on Lundy, 159; Disappearance of Yorkshire nesting-colony, 191.
- , Common, Recovery of marked, 242; in Norfolk, 260.
- , Great Black-backed, in Isle of Man, 19; Breeding in Somersetshire, 41, 66; in the Isles of Scilly, 56; Killing Razorbill, 67; should it be protected on Steep Holm?, 148; on Lundy, 159; Nesting in Ayrshire, 196.
- , Herring-, in the Isles of Scilly, 57; on Lundy, 159.
- , Iceland, New name for, 4; in the Isles of Scilly, 23; in Scotland, 196; in Norfolk, 259.
- , Ivory-, in Gloucestershire, 288.
- , Lesser Black-backed, in the Isles of Scilly, 57; Recovery of marked, 81, 242.
- , Little, in Norfolk, 66, 273; in Ireland, 288.
- , Scandinavian Lesser Black-backed, at Isle of May, 191; in the Scilly Isles, 213; in Norfolk, 259.
- GURNEY, GERARD H., Notes on Nuthatch concealing its eggs during incubation, 21; Smew inland in Norfolk, 289.
- GURNEY, J. H., Completion of his Ornithological Notes for Norfolk for 1922, 254.
- HACHISUKA, MASA U., Note on two unusual Blackbirds' nests, 186.
- HALE, REV. J. R., Notes on Grey Wagtail nesting in Kent, 23; Utility of the Tawny Owl, 23; Curious nesting site of Redshank in Kent, 88.
- haliaëtus*, *Pandion h.*, see Osprey.
- Hand-list of British Birds*, Changes in the, 4.
- Harrier, Hen-, in Isle of Man, 18; Nesting in Perthshire, 196; in Surrey, 204; in Lancashire, 209; in Norfolk, 257; in Shropshire, 309.

- Harrier, Marsh-, in Norfolk, 268.
 —, Montagu's, in Carnarvonshire, 86; in Surrey, 204; in Norfolk, 268.
- HARTERT, DR. ERNST, The name of the Scottish Ptarmigan, 106.
- HARVEY, A. W. H., Note on Little Owl in Cornwall, 90.
- HARVEY, G. H., Notes on Grey-headed and Blue-headed Wagtails in Cornwall, 38; Blue-headed Wagtail nesting in Cornwall, 84.
- Hawfinch in Norfolk, 265; in Renfrewshire, 274.
- Hawk, Sparrow-, Recovery of marked, 80, 240; in Norfolk, 257.
- hebridensis*, *Turdus ph.*, see Thrush, Hebridean Song-.
- HENDY, E. W., Note on the Spotted Redshank in Cheshire, 145.
- Heron, Recovery of Marked, 240.
- hiaticula*, *Charadrius*, see Plover, Ringed.
- hibernans*, *Saxicola l.*, see Stonechat.
- hibernicus*, *Lagopus s.*, see Grouse, Irish Red.
- himantopus*, *Himantopus*, see Stilt, Black-winged.
- hirundo*, *Sterna*, see Tern, Common.
- Hobby, in Scotland, 196; Breeding in Surrey, 204.
- HODGSON, S. B., Letter on Cuckoo's egg in Chaffinch's nest, 214.
- HODSON, L. R., Note on Gannet inland in Essex, 289.
- Hoopoe, on Lundy, 158; in Kirkcudbrightshire, 191.
- HORNE, REV. ETHELBERT, A Swallow's method of feeding young with flies, 306; Letter on Oviposition of the Cuckoo, 215.
- HUMPHREYS, G. R., The Malahide, co. Dublin, Tern Colony, 5; Notes on Waxwings in Ireland, 275; Glossy Ibis in co. Cork, 280.
- hyperboreus*, *Anser*, see Goose, Snow-.
- hypoleuca*, *Muscicapa h.*, see Flycatcher, Pied.
- Ibis, Glossy, in co. Cork, 280.
- ignicapillus*, *Regulus*, see Firecrest.
- immer*, *Colymbus*, see Diver, Great Northern.
- INGRAM, GEOFFREY C. S., Note on Great Black-backed Gull breeding in Somersetshire, 41.
- , and H. MORREY SALMON, Field notes from Glamorgan-shire, 94.
- intermedia*, *Alauda a.*, see Lark, Eastern Sky-.
- interpres*, *Arenaria*, see Turnstone.
- IREDALE, T., see Mathews, G. M.
- ispida*, *Alcedo a.*, see Kingfisher.
- Jackdaw, Recovery of marked, 77; Method of collecting nesting-material, 109.
- Jay, Colour of the iris in the juvenile, 82, 115.
- JOURDAIN, REV. F. C. R., on the names proposed by Rennie in Montagu's Ornithological Dictionary, 108; Notes on abnormal clutch of Kestrel's eggs, 62; the normal clutch of Tern's eggs, 250; the breeding season of the Nut-hatch, 308.
- JOY, DR. NORMAN H., Notes on Dipper nesting in Wiltshire, 86; Smews in Berkshire, 213.
- Kestrel, in the Isles of Scilly, 56; Abnormal clutch of eggs of, 62; Unusual flight of, 247; in Norfolk, 268.
- Kingfisher, Notes on nesting, 155.
- Kite, Black, Does it take live fish?, 47.
- Kittiwake, in Isle of Man, 20; on Lundy, 159; on North Worcestershire Reservoirs, 282.
- Knot in Isle of Man, 19.
- lagopus*, *Buteo l.*, see Buzzard Rough-legged.
- Landrail in Isle of Man, 20.
- lapponicus*, *Calcarius l.*, see Bunting, Lapland.
- Lapwing, Recovery of marked, 81, 241; Large clutches of eggs of, 193.
- Lark, Eastern Sky-, New name for, 2.
- , Shore-, in Norfolk, 266.
- , Sky-, in the Isles of Scilly, 55; Recovery of marked, 78; Folklore in Shetland, 115; Late immigration into Kent, 274.

- Lark, Wood-, Status of in Somerset, 59; at the Isle of May, 195; Breeding in Surrey, 198; in Norfolk, 265.
- leucomela*, *Cenanthe l.*, see Wheatear Pied.
- leucorodia*, *Platalea l.*, see Spoonbill.
- leucorrhoa*, *Oceanodroma l.*, see Petrel, Leach's Fork-tailed.
- LEWIS, STANLEY, Notes on Nut-hatch concealing its eggs during incubation, 22; Great Black-backed Gull breeding on Steep Holm, 67; Probable Ferruginous Duck in Somerset, 188; Letters on should the larger Gulls be protected?, 148; Nest Material of Pied Flycatcher, 171; Birds removing nesting material to another site, 192.
- Linnet, in the Isles of Scilly, 56; Feeding on fir-cones in Cumberland, 224; Recovery of marked, 236.
- limosa*, *Limosa*, see Godwit, Black-tailed.
- livia*, *Columba*, see Dove, Rock.
- lobatus*, *Phalaropus*, see Phalarope, Red-necked.
- LODGE, G. E., Note on Great Spotted Woodpecker and pine-cones, 280; Letter on birds removing nesting-material to another site, 290.
- LODGE, REG. B., Note on Brambling in Middlesex in July, 83.
- longicauda*, *Bartramia*, see Sandpiper, Bartram's.
- Lotor*, *Motacilla*, see Wagtail, Pied.
- Low, DR. G. C., Note on Bartram's Sandpiper in Scilly Isles, 289; Letter on Gadwall in London, 193.
- LOYD, L. R. W., Further observations on the Birds of Lundy, June and July 1923, 158; Note on late stay of Yellow Wagtail, 213.
- Lundy I., Observations on the Birds of, 158.
- MACFARLANE, P. C., Letter on Red-breast feeding on haws, 24.
- MACPHERSON, A. H., Note on Goosanders in Middlesex, 209.
- Magpie, Breeding habits of, in Cumberland, 223.
- major*, *Dryobates*, see Woodpecker, Great Spotted.
- , *Parus m.*, see Tit, Continental Great.
- Malahide, co. Dublin, Tern Colony, 5.
- Mallard in the Isles of Scilly, 56.
- Manx Ornithological Notes for 1921 and 1922, 17.
- marila*, *Nyroca m.*, see Duck, Scaup.
- marinus*, *Larus*, see Gull, Greater Black-backed.
- maritima*, *Erolia m.*, see Sandpiper, Purple.
- Marked Birds, Recovery of, 77, 236; a correction *re* Song-Thrush, 114.
- Marking Scheme, The "British Birds," progress for 1923, 231.
- Martins, House-, Movements of, in the Scilly Isles, 39; in the Isles of Scilly, 56; Breeding habits, 183; Nesting at Fair Isle, 195.
- , Sand-, Remarkable nesting-site, 187.
- MASEFIELD, J. R. B., Note on Moorhen carrying young, 147.
- MASSEY, HERBERT, Letter on should the "Larger Gulls" be protected?, 116.
- MATHEWS, G. M. and IREDALE, T., Letter on the name of the British Song-Thrush, 47.
- MEADE-WALDO, E. G. B., Letter on nesting of the Whimbrel and Curlew in Shetland, 116.
- media*, *Capella*, see Snipe, Great.
- melophilus*, *Erithacus r.*, see Red-breast.
- merganser*, *Mergus m.*, see Goosander.
- Merlin nesting in trees in Yorkshire, 90; Breeding-habits of, in Glamorganshire, 95.
- merula*, *Turdus*, see Blackbird.
- migrans*, *Milvus m.*, see Kite, Black.
- millaisi*, *Lagopus m.*, New name for Scottish Ptarmigan, 106.
- minuta*, *Calidris*, see Stint, Little.
- minutus*, *Ixobrychus m.*, see Bittern, Little.
- , *Larus*, see Gull, Little.
- mira*, *Athene n.*, see Owl, Little.

- modularis*, *Prunella m.*, see Sparrow, Continental Hedge-.
- montifringilla*, *Fringilla*, see Brambling.
- MOON, DR. H. J., Notes on large clutch of Spotted Flycatcher's eggs, 59; Dipper nesting away from water, 59; Nest occupied by Raven, Buzzard and Peregrine in successive years, 59.
- Moorhen, in the Isles of Scilly, 57; Decorated nest of, 68, 89; Carrying young, 147.
- MOREAU, R. E., Note on Little Owl in Cornwall, 42.
- morinellus*, *Charadrius*, see Dotterel.
- MUSSELWHITE, D. W., Note on early breeding of Yellow Bunting in Suffolk, 38; Letters on Dipper nesting in Wiltshire, 115; Cuckoos' eggs in domed nests, 252.
- nævia*, *Locustella n.*, see Warbler, Grasshopper, 200.
- nebularia*, *Tringa*, see Greenshank.
- nesa*, *Pyrrhula p.*, see Bullfinch, British.
- niger*, *Chlidonias n.*, see Tern, Black, Nightjar in the Isles of Scilly, 56.
- nigra*, *Oidemia*, see Scoter, Common.
- nigricollis*, *Podiceps n.*, see Grebe, Black-necked.
- nisoria*, *Sylvia n.*, see Warbler, Barred.
- nisus*, *Accipiter n.*, see Hawk, Sparrow-.
- nivalis*, *Plectrophenax*, see Bunting, Snow-.
- noctua*, *Athene*, see Owl, Little.
- Nuthatch, British, New name, 3; Concealing its eggs during incubation, 21, 22; Breeding-season of, 308.
- nyroca*, *Nyroca*, see Duck, Ferruginous.
- occidentalis*, *Prunella m.*, see Sparrow, Hedge-.
- ochropus*, *Tringa*, see Sandpiper, Green.
- ædicnemus*, *Burhinus æ.*, see Curlew, Stone-.
- ænanthe*, *Ænanthe æ.*, see Wheatear.
- ænas*, *Columba*, see Dove, Stock-.
- Oriole, Golden, Probable in Suffolk, 21; in Shropshire, 38; in Dumfries-shire, 83; at the Isle of May, 195; in Norfolk, 265.
- oriolus*, *Oriolus*, see Oriole, Golden.
- ORTON, PROF. KENNEDY, Notes on Great Grey Shrike in Anglesey, 85; Black Redstart in Sussex in spring, 90; Common Buzzards in Sussex, 90.
- Osprey in Norfolk, 269.
- ostralegus*, *Hæmatopus o.*, see Oystercatcher.
- OTTLEY, M. F. B., see Tucker, B. W.
- Owl, Barn-, Curious mass of bones found in nest of, 60; White-breasted, on Lundy, 159.
- , Little, in Pembrokeshire, 22; in Cornwall, 42, 90; Increase in Glamorganshire of breeding birds, 94; Breeding in Yorkshire, 191; in Norfolk, 256.
- , Scops, in Norfolk, 257.
- , Short-eared, in Surrey, 204; in Norfolk, 268.
- , Tawny, Note on utility of, 23; Feeding young in August, 112; Preying on Little Grebe, 250.
- Oystercatcher, Unusual nest of, 41, 87; White egg of, 168; Large clutch of eggs of, 193; in Norfolk, 271.
- PAGE, E., and TUCKER, B. W., Note on Spotted Redshank in Somerset, 211.
- palumbus*, *Columba p.*, see Pigeon, Wood-.
- palustris*, *Acrocephalus*, see Warbler, Marsh-.
- paradisea*, *Sterna*, see Tern, Arctic.
- parasiticus*, *Stercorarius*, see Skua, Arctic.
- Partridge, Common, Pattern of greater wing-coverts, 314.
- , Red-legged, Breeding habits, 315.
- , "Mountain," in Norfolk, 260.
- parva*, *Muscicapa p.*, see Flycatcher, Red-breasted.
- PATON, E. R., Notes on Hebridean Song-Thrush on migration in Ayrshire, 165; Large clutch of Peregrine Falcon's eggs, 188; Note on Spotted Redshanks in Somerset, 248.

- penelope*, *Anas*, see Wigeon.
Perdix p. perdix, see Partridge, Common.
perdix, var. *montana*, *Perdix*, see Partridge, "Mountain."
peregrinus, *Falco p.*, see Falcon, Peregrine.
perspicillata, *Oidemia*, see Scoter, Surf-.
- PETERS, J. F., Note on Common Sandpiper in Westmorland in midwinter, 248.
- Petrel, Fulmar, Increase of, on the Yorkshire coast, 40; Nesting on the Isle of May, 196.
- , Leach's Fork-tailed, off Norfolk, 270.
- Phalarope, Grey, at Somerset Reservoirs, 211; in Cumberland, 227.
- , Red-necked, seen off co. Kerry, 43; in Cheshire, 88; Nesting in Outer Hebrides, 196; in Norfolk, 272.
- Pheasant, Unusual nesting-site, 42; on Lundy, 159; A Fourteenth Century Portrait, 313.
- , Ring-necked, Introduction of to Great Britain, 36.
- phænicurus*, *Phænicurus ph.*, see Redstart.
- phæopus*, *Numenius*, see Whimbrel.
- pica*, *Pica p.*, see Magpie.
- Pigeon, Wood-, in the Isles of Scilly, 56; Recovery of marked, 81; Nestling of, 226.
- Pigeons, Homing-, and Pigeon-racing, 118, 172.
- Pintail in Norfolk, 270.
- Pipit, Meadow-, Recovery of marked, 78.
- , Richard's, in Norfolk, 255.
- , Water-, Status of, in England, 304.
- platyrhyncha*, *Anas*, see Mallard.
- Plover, Grey, in Staffordshire, 142.
- , Kentish, Large clutch of eggs of, 193.
- , Little Ringed, Large clutch of eggs of, 193.
- , Ringed, in Staffordshire, 142; Recovery of marked, 241; Nesting among potatoes, 283.
- Pochard, in Staffordshire, 141; Breeding in Oxfordshire, 311.
- , Red-crested, on Essex Reservoirs, 310.
- PORTAL, M., Notes on Golden Oriole in Dumfries-shire, 83; Montagu's Harrier in Carnarvonshire, 86; Breeding habits of the Red-legged Partridge, 315.
- POWELL, T. G., Notes on unusual position for nest of Goldcrest, 39; Feeding habit of the Hooded Crow, 243; Letters on velocity of flight of Cormorant, 24; Two young Cuckoos fed by the same Pied Wagtail, 252.
- Practical Handbook of British Birds*, Additions and Corrections, 2.
- præmium*, *Phylloscopus h.*, see Warbler, Yellow-browed.
- pratensis*, *Alauda*, see Pipit, Meadow-.
- PRING, C. J., Note on unusual nesting-site of Pheasant, 43.
- Ptarmigan, Scottish, The name of, 106.
- Puffin in the Isles of Scilly, 58.
- , British, on Lundy, 159.
- puffinus*, *Puffinus*, see Shearwater, Manx.
- pugnax*, *Philomachus*, see Ruff.
- pusilla*, *Emberiza*, see Bunting, Little.
- PYCRAFT, W. P., Note on pattern of greater wing-coverts in Common Partridge, 314.
- pygargus*, *Circus*, see Harrier, Montagu's.
- pyrrhula*, *Pyrrhula p.*, see Bullfinch, Northern.
- Quail, in Isle of Man, 20; in Norfolk, 260.
- querquedula*, *Anas*, see Garganey.
- RALFE, P. G., Manx Ornithological Notes for 1921 and 1922, 17; for 1923, 229.
- Raven, in Isle of Man, 17; Nest of, occupied in successive years by Buzzard and Peregrine, 59; on Lundy, 158; Removing nesting material to another site, 171.
- rayi*, *Motacilla f.*, see Wagtail, Yellow.
- Razorbill, on Lundy, 159.

- Redbreast, Feeding on Haws, 24 ; in the Isles of Scilly, 55 ; Recovery of marked, 80, 238 ; Breeding-habits of, in Cumberland, 225 ; Cannibalistic propensity of a Redbreast, 251 ; a study of, by means of marked birds, 294.
- Redpoll, Lesser, Breeding-habits of, in Glamorganshire, 94 ; a nesting-habit of, 148.
- , Mealy, in Norfolk, 265.
- Redshank, Curious nesting-site, 88 ; Unusual nesting-site of, in Cumberland, 144 ; Breeding in Surrey, 205, 283 ; Recovery of marked, 241.
- , Spotted, on north Worcester-shire Reservoirs, 283 ; at Dungeness, 27 ; in Cheshire, 145 ; in Shropshire, 169 ; in Somerset, 211, 248 ; in Norfolk, 271.
- Redstart in Norfolk, 267.
- , Black, in Sussex in spring, 90 ; in Norfolk, 255, 267.
- Reviews :—
- A Natural History of the Ducks, 44.
- The Great Waxwing Invasion of 1921, 45.
- The Abbreviated Inner Primaries of Nestling Woodpeckers, 45.
- Notes on the Birds of Dumfriesshire, 194.
- Report on Scottish Ornithology in 1922, including Migration, 195.
- A Chronological List of British Birds, 196.
- Guide to the Birds of Europe and North Africa, 217.
- Game Birds and Wild-Fowl of Great Britain and Ireland, 218.
- Birds and their young, 219.
- richardi*, *Anthus r.*, see Pipit, Richards'.
- ridibundus*, *Larus r.*, see Gull, Black-headed.
- Ring-Ouzels in Kent, in winter, 308.
- RINTOUL, Miss L. J., and BAXTER, Miss E. V., Note on Moorhen's decorated nest, 89 ; see also Baxter, Miss E. V.
- riparia*, *Riparia r.*, see Martin, Sand-.
- RIVIERE, Dr. B. B., Homing Pigeons and Pigeon-Racing, 118, 172 ; Ornithological notes from Norfolk completing Mr. Gurney's Report for 1922, 254, and for 1923, 260 ; Note on the colour of the iris in the juvenile Jay, 82.
- ROBINSON, H. W., Notes on the Iceland Gull in the Isles of Scilly, 23 ; Movements of House-Martins in the Scilly Isles, 39 ; the dive of the Great Northern Diver, 64 ; Great Black-backed Gull killing Razorbill, 67 ; Departure of Grey Lag-Geese, 90 ; Large clutch of Curlew's eggs, 146 ; The normal clutch of Sandwich Tern's eggs, 212 ; Scandinavian Lesser Black-backed Gull in the Scilly Isles, 213 ; Ruff wintering three times in Lancashire, 248 ; Ringed Plover nesting among potatoes, 283 ; Gadwall in North Lancashire, 309 ; Letters on recent changes in the birds of Scilly, 91 ; Dive of the Great Northern Diver—a correction, 92.
- Roller in Devonshire, 86.
- Rook, Large clutch of eggs, 89.
- roseus*, *Ægithalos c.*, see Tit, British Long-tailed.
- ROWAN, Prof. Wm., Letter on the "normal" clutch of eggs, 290.
- rubecula*, *Erithacus*, see Redbreast.
- rubetra*, *Saxicola r.*, see Whinchat.
- rufa*, *Alectoris r.*, see Partridge, Red-legged.
- Ruff, Feeding-habits, 113 ; at Somerset Reservoirs, 210 ; Wintering three times in Lancashire, 248 ; in Norfolk, 271.
- ruficollis*, *Podiceps*, see Grebe, Little.
- rufina*, *Netta*, see Pochard, Red-crested.
- rustica*, *Hirundo r.*, see Swallow.
- rusticola*, *Scolopax*, see Woodcock.
- RUTTLEDGE, R. F., Notes on Little Gull in Ireland, 288 ; Stock-Doves in co. Mayo, 312.

- SALMON, H. M., Notes on Great Black-backed Gull breeding in Somersetshire, 41; see Ingram, G. C. S.
- Sandpiper, Bartram's, on Scilly Isles, 289.
- , Common, in Westmorland in mid-winter, 248.
- , Curlew-, in Isle of Man, 19; in Staffordshire, 142; at Somerset Reservoirs, 210; in Norfolk, 271; on North Worcestershire Reservoirs, 282.
- , Green, in Isle of Man, 19; in Staffordshire, 142; in Cheshire, 144, 146; in Norfolk, 271; on Essex Reservoirs, 310; in Buckinghamshire in winter, 316.
- , Purple, in Isle of Man, 19.
- , Wood-, in Leicestershire, 88; in Cheshire, 145, 146.
- sandvicensis*, *Sterna* s., see Tern, Sandwich.
- SAVAGE, REV. E. U., Note on Roseate Tern breeding in Cumberland, 249.
- Scaup-Duck and Gadwall in London, 167.
- SCHOLEY, G. J., Letters on Reed-Warbler removing nesting material to another site, 171; Cuckoo laying twice in the same nest, 171; Cuckoo's egg in Chaffinch's nest, 214.
- Scilly Isles, Recent changes in the birds of, 55, 91.
- scops*, *Otus* s., see Owl, Scops.
- Scoter, Common, Inland in Cheshire in summer, 87; Inland in Sussex and Hampshire, 281; Oil-clogged, inland in Cheshire, 316.
- , Surf-, in Devonshire, 311.
- senator*, *Lanius* s., see Shrike, Woodchat.
- SERLE, REV. WILLIAM, Note on fledgling period of Swift, 110.
- Seventeenth Century names for some British Birds, 50.
- Shag, New name, 3; Found inland in Cheshire, 143; Inland in Somerset, 169, 216; in Warwickshire, 188; in Oxfordshire, 210; Recovery of marked, 240.
- Shearwater, Great, in Argyllshire, 87.
- , Manx, in the Isles of Scilly, 57; in Warwickshire, 188; in Shropshire, 289.
- Shoveler in Staffordshire, 141.
- Shrike, Great Grey, in Anglesey, 85; in Surrey, 165; in Norfolk, 266.
- , Woodchat, in Pembrokeshire, 22.
- sibilatrix*, *Phylloscopus*, see Warbler, Wood-.
- Sixteenth Century Bird Drawings, 12.
- Skua, Arctic, Breeding on Islay, 196.
- , Great, in Norfolk, 260.
- skua*, *Stercorarius* s., see Skua, Great.
- SMEED, MAJOR C., Notes on probable second brood of Stone-Curlew, 65; on a Jackdaw's way of collecting nesting material, 109; Little Grebe and Coot laying in same nest, 112; Letter on Cuckoos' eggs in domed nests, 292.
- Smew, in Staffordshire, 141; in Berkshire, 213; Inland in Norfolk, 289; on Essex Reservoirs, 310.
- Snipe, American, Distinctions of, and its occurrence in Britain, 283.
- , Great, in Cumberland, 228.
- Sparrow, Hedge-, in the Isles of Scilly, 55; Recovery of marked, 80, 239.
- , Hedge-, Continental, in Norfolk, 256.
- , House-, in the Isles of Scilly, 56; on Lundy, 158.
- SPENCER, H., Note on Scaup-Duck inland in Yorkshire, 213.
- SPERLING, C. F. D., Note on Tawny Owl preying on Little Grebe, 250.
- spermologus*, *Colæus* m., see Jackdaw.
- spinoletta*, *Anthus* s., see Pipit, Water-.
- Spoonbill in Norfolk, 269.
- squatarola*, *Squatarola*, see Plover, Grey.
- Staines Reservoir, Middlesex, Note on Birds at, 143.

- Starling, in the Isles of Scilly, 56 ;
Recovery of marked, 77, 236 ;
on Lundy, 158.
- stellaris*, *Botaurus s.*, see Bittern,
Common.
- stellatus*, *Colymbus*, see Diver, Red-
throated.
- Stilt, Black-winged, in Hampshire,
212.
- Stint, Little, in Isle of Man, 19 ; in
Norfolk, 66, 259, 271 ; in
Staffordshire, 142 ; in the
Outer Hebrides, 196.
- , Temminck's, at Dungeness,
27.
- Stonechat in the Isles of Scilly, 55.
- strepera*, *Anas*, see Gadwall.
- striata*, *Muscicapa s.*, see Fly-
catcher, Spotted.
- subbuteo*, *Falco s.*, see Hobby.
- svecica*, *Luscinia*, see Bluethroat.
- SWAEN, A. E. H., Note on Great
Spotted Woodpecker and
pine-cones, 276.
- Swallow, in the Isles of Scilly, 56 ;
Ringed in South Wales, found
in Belgian Congo, 60 ; Breeding
habits, 183 ; Recovery of
marked, 80 ; Nest without
mud, 109 ; Method of feeding
young with flies, 306.
- Swan, Bewick's, in Glamorganshire,
63 ; in Staffordshire, 140 ; in
Norfolk, 258, 269.
- , Mute, Early History of, in
England, 174.
- , Whooper, in Norfolk, 258,
269.
- Swift, in the Isles of Scilly, 56 ;
Fledgling period of, 110 ; Late
stay of, in Scotland, 166 ;
Recovery of marked, 240.
- Swiss National Park, Notes on
some birds of, 160.
- sylvatica*, *Strix a.*, see Owl, Tawny.
- SYMES, JOSEPH H., Note on small
broods of Cirl Bunting, 109.
- tadorna*, *Tadorna*, see Duck, Sheld-.
- Teal, in Staffordshire, 140 ;
Breeding in Surrey, 205.
- temminckii*, *Calidris*, see Stint, Tem-
minck's.
- Tern, the Malahide Colony, failure
of, 114.
- , Arctic, in the Isles of Scilly,
57 ; in Norfolk, 273.
- Tern, Black, in Staffordshire, 142 ;
in Norfolk, 272.
- , Common, in the Isles of
Scilly, 57.
- , Little, Breeding habits of, in
Cumberland, 228.
- , Roseate, at Malahide, co.
Dublin, 5 ; in Scotland, 196 ;
Breeding in Cumberland, 249 ;
in Norfolk, 273.
- , Sandwich, at Malahide, co.
Dublin, 5 ; Breeding in
Dorset, 89 ; in Somerset, 147 ;
Normal clutch of eggs, 189,
212, 249 ; in Norfolk, 189, 272.
- THOMAS, J. F., Notes on nest of
Swallow without mud, 109 ;
Variation in breeding-season
of Wheatear, 143.
- THOMPSON, G. W., Notes on Willow-
Warbler's nests and Cuckoo's
egg, 244 ; the breeding season
of the Nuthatch, 308.
- THORPE, W. H., Notes on status
of the Wood-Lark in Somerset,
59 ; some birds of the Swiss
National Park, 160.
- Thrush, British Song-, Name of, 47 ;
in the Isles of Scilly, 55 ; in
Alderney, 190 ; Recovery of
marked, 78, 237.
- , Hebridean Song-, on migra-
tion in Ayrshire, 165.
- , Mistle-, Recovery of marked,
237.
- thunbergi*, *Motacilla f.*, see Wagtail,
Grey-headed.
- TICEHURST, DR. N. F., on some Six-
teenth Century Bird Drawings,
12 ; Some British Birds in the
Fourteenth Century, 29 ; The
early history of the Mute
Swan in England, 174 ; Note
on Black-necked Grebe in
Sussex, 22.
- tinnunculus*, *Falco t.*, see Kestrel.
- Tit, British Blue, in Alderney, 190.
- , British Coal-, in Isle of Man,
17.
- , British Long-tailed, in Isle of
Man, 17 ; Nest-building habits
of, 206, 243, 244.
- , Continental Great, in Alder-
ney, 190.
- , Great, in the Isles of Scilly,
50.
- torda*, *Alca*, see Razorbill.

- torquatus*, *Phasianus c.*, see Pheasant, Ring-necked.
 —, *Turdus*, see Ring-Ouzel.
torquilla *Jynx t.*, see Wryneck.
totanus, *Tringa t.*, see Redshank.
 TRACY, N., Note on Great Spotted Woodpecker and pine-cones, 276.
tridactyla, *Rissa t.*, see Kittiwake.
trochilus, *Phylloscopus t.*, see Warbler, Willow-.
troglodytes, *Troglodytes t.*, see Wren.
trouille, *Uria t.*, see Guillemot, Common.
 TROUBRIDGE, SIR T. H. C., Bart., Note on Black-winged Stilt in Hampshire, 212.
tschusii, *Emberiza t.*, see Bunting, Eastern Large-billed Reed-.
 TUCKER, B. W., Notes on Cuckoo's egg in Chaffinch's nest, 166; Shag inland in Somerset, 169; Ruff and other visitors at Somerset Reservoirs, 210; Letters on oviposition of the Cuckoo, 214; Shag inland in Somerset, 216; Slavonian Grebe in Somerset, 312; see Page, E.
 TUCKER, B. W., and OTTLEY, M. F. B., Note on breeding of Pochard and Tufted Ducks in Oxfordshire, 311.
 TUCKETT, COLDSTREAM, see Gait, R. P.
 Turnstone in the Isles of Scilly, 57.
 TURTLE, L. J., Note on white egg of Oystercatcher, 168.
turtur, *Streptopelia t.*, see Dove, Turtle-.
 TUTT, H. R., Note on Garganey breeding in Essex, 280; Letter on Cuckoos' eggs in domed nests, 291.
urbica, *Delichon u.*, see Martin, House-.
vanellus, *Vanellus*, see Lapwing.
virescens, *Picus v.*, see Woodpecker, Green.
viscivorus, *Turdus v.*, see Thrush, Mistle-.
vulgaris, *Sturnus v.*, see Starling.
 Wagtail, Blue-headed, in Cornwall, 38; Nesting in Cornwall, 84.
 Wagtail, Grey, Nesting in Kent, 23; Early nesting of, 39; Early nesting in the south of England, 85; Late nesting, 165; Breeding in Surrey, 199; in Norfolk, 266; Removing nesting-material to another nest, 290.
 —, Grey-headed, in Cornwall, 38.
 —, Pied, New name for, 3; Rennie's name for, 108; Recovery of marked, 237.
 —, Yellow, Late stay of, 213.
 WALLIS, E. A., Notes on increase of the Fulmar Petrel on the Yorkshire coast, 40; Martins nesting in trees in Yorkshire, 90; Recent changes in the birds of Scilly, 55; Letter on recent changes in the birds of Scilly, 91.
 Warbler, Barred, at the Isle of May, 195.
 —, Dartford, Numbers of, in Surrey, 200.
 —, Eversmann's, on Fair Isle, 195.
 —, Garden-, in Isle of Man, 18.
 —, Grasshopper-, Breeding in Surrey, 200.
 —, Marsh-, Breeding in Berkshire, 185; Description of the Nestling, 185; in Norfolk, 267.
 —, Reed-, Removing nesting-material to another site, 171.
 —, Wood-, in Isle of Man, 18; Breeding in Surrey, 200; in Norfolk, 267.
 —, Yellow-browed, in Fifeshire, 42; in Lincolnshire, 186; at the Isle of May, 195.
 WATSON, J. B., Note on song of the Citril Finch, 38; Letter on does the Black Kite take live fish?, 47.
 WATSON, W. G., Note on Little Bunting in Northumberland, 308.
 Waxwing, in Isle of Man, 17; in Norfolk, 266; in Ireland, 275; in England, 275; in Essex, 316.
 Wheatear in the Isles of Scilly, 55; Recovery of marked, 79; Variation in breeding-season of, 143; on Lundy, 158.

- Wheatear, Eastern Desert-, New name for, 3.
 —, Pied, New name for, 3.
 Whimbrel, in the Isles of Scilly, 57 ; Nesting in the Shetland Isles, 70, 116, 150.
 Whinchat in Isle of Man, 18.
 WHISH, F. H. L., Note on Ivory Gull in Gloucestershire, 288.
 WHITE, W. WALMESLEY, Notes on Roller in Devonshire, 86 ; Surf-Scoters in Devonshire, 311.
 Whitethroat, Large clutch of eggs of, in Cumberland, 224 ; Recovery of marked, 237.
 —, Lesser, in Isle of Man, 18.
 Wigeon in Staffordshire, 140.
 WITHERBY, H. F., on the Red Grouse from Ireland and the Outer Hebrides, 107 ; the " British Birds " marking scheme, progress for 1923, 231 ; Notes on Swallow ringed in South Wales found in the Belgian Congo, 60 ; the colour of the iris in the juvenile Jay, 82 ; British Blue Tit in Alderney, 190 ; Pine-cones and Woodpeckers, 208 ; Distinctions of American Snipe and its occurrence in Britain, 283.
 Woodcock, Large clutch of eggs of, 193 ; Recovery of marked, 242 ; Marked abroad and recovered in England, 242.
 Woodpecker, Great Spotted, in Argyllshire, 42 ; Breeding in Forfarshire, 191 ; Increase of, in Scotland, 195 ; and pine-cones, 208, 245, 276.
 —, Great Spotted, Northern, in Isle of Man, 18.
 —, Lesser Spotted, Reported in Scotland, 195.
 Woodpeckers and pine-cones, 202, 208, 245, 276.
 Wren, in the Isles of Scilly, 55 ; Breeding-habits of, in Cumberland, 225 ; Recovery of marked, 240 ; Winter breeding of, 275.
 Wrynecks, in Yorkshire, 40 ; in Surrey, 202, 251.
yarrellii. *Motacilla a.*, see Wagtail, Pied.

STEVENS'S AUCTION ROOMS, LTD.

ESTD. 1760.

38, King Street, Covent Garden, London, W.C.2.

Periodical Sales

are held at the above Rooms, of NATURAL HISTORY SPECIMENS, including BIRDS and BIRDS' EGGS, CABINETS, etc. Also BOOKS relating to Natural History.

Catalogues of sales posted on application.

WHELDON & WESLEY, LTD.

have in stock nearly all the books and journals required by ornithologists. The collection of old and rare works is one of the largest in the country. New books and journals supplied to order. Books not in stock sought for. Just issued: Catalogue No. 9 (new series), Ornithology, 2d. post free.

Bookbinding in all its branches undertaken. Libraries and parcels of books purchased.

LONDON:—2, 3, & 4, Arthur St., NEW OXFORD STREET, W.C.1.

Telephone:—Gerrard 1412.

WATKINS & DONCASTER, NATURALISTS.

CABINETS and APPARATUS of every kind for Collectors of Birds' Eggs, Insects, &c.

A LARGE STOCK OF BIRDS' EGGS (also in Clutches) and BRITISH and EXOTIC BUTTERFLIES, &c.

NESTING BOXES OF VARIOUS PATTERNS, which should be fixed up in Gardens or Shrubberies by Lovers of Birds before the Breeding Season.

All Books and Publications (new and second-hand) on Natural History supplied.

36, STRAND, LONDON, W.C.2., ENGLAND.

TAXIDERMY.

The Setting-up and Mounting of Birds and Mammals.

The Modelling and Mounting of Hunting Trophies in any Metal, to any Design.

The Dressing, Dyeing and Making-up of Fur-skins for all purposes.

Charges Moderate consistent with very carefully executed work.

F. H. L. WHISH,
LYMPHAM, SOMERSET.



**H. F. & G.
WITHERBY'S**



**NEW SPRING
BOOKS**

A Practical Handbook of British Birds

Edited by H. F. WITHERBY, M.B.E., M.B.O.U., F.Z.S. Demy 8vo. 1,500 pages letterpress, 30 coloured and monochrome plates, about 350 text figures. In 2 vols. (bound as 3), **£4 10s. net**
"The information is so trustworthy that the book will remain the standard reference book on British birds for very many years to come."—*Manchester Guardian*.

The Birds of Portugal

By WILLIAM C. TAIT, F.Z.S., M.B.O.U. Demy 8vo., with photographs and a map in colours, **18/- net**

The Bird as a Diver

A contribution to the Natural History of Diving Birds. By JOHN M. DEWAR, M.D. Demy 8vo., **10/6 net**

The Literature of the Charadriiformes

From 1894 to 1924. By G. C. Low, M.A., M.D., M.R.C.P., F.Z.S., M.B.O.U. Demy 8vo., **12/6 net**

A Check-List of British Birds

Compiled from "A Practical Handbook of British Birds," by H. F. WITHERBY, M.B.E., F.Z.S., M.B.O.U. Demy 8vo., Paper covers 3/- net. Stiff Boards, **3/6 net**

Kilimanjaro and its People

A History of the Wachagga, Their Laws, Customs and Legends. By the HON. CHARLES DUNDAS, O.B.E. (Senior Commissioner Tanganyika Territory). Demy 8vo., numerous photographs, **18/- net**

The Peaks, Lochs and Coasts of the Western Highlands

Penned, and Pictured with one hundred photographs, by ARTHUR GARDNER, M.A., F.S.A. Demy 8vo., **15/- net**

White and Black in East Africa

By HERMANN NORDEN, F.R.G.S., Author of "From Golden Gate to Golden Sun." Demy 8vo. Photographs and maps, **15/- net**

Deer Stalking in Scotland

By ALEXANDER I. McCONNOCHIE, F.Z.S., Author of "The Deer and Deer Forests of Scotland," etc. With an Introduction by The DUKE OF ATHOLL, K.T. Demy 8vo. Illustrated, **10/6 net**

Vivarium and Aquarium Keeping for Amateurs

A Practical Guide to the Hobby. By A. E. HODGE, F.Z.S. Crown 8vo., with photographs, and text illustrations, **5/- net**

The Irish Setter

Its History and Training. By COLONEL J. K. MILLNER. With an Introduction by S. W. CARLTON. Crown 8vo., with photographs, **5/- net**

A/O.

